

VERIFICATION SAMPLING AT
SELECTED RCRA UNITS

PREPARED FOR:


BERMITE DIVISION
WHITTAKER CORPORATION
22116 WEST SOLEDAD CANYON ROAD
SAUGUS, CALIFORNIA 91350

PREPARED BY:

WENCK ASSOCIATES, INC.
832 TWELVE OAKS CENTER
15500 WAYZATA BOULEVARD
WAYZATA, MINNESOTA 55391-1418
(612) 475-0858

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I hereby certify that this report was prepared by me or under my direction supervision and that I am a duly Registered Professional Engineer under the laws of the State of California.



Norman C. Wenck

3-28-88

California Registration No. 41317

TABLE OF CONTENTS

	<u>PAGE</u>
I. INTRODUCTION	1
II. SAMPLING AND ANALYSIS PROCEDURES	2
A. Drilling Rig	2
B. Split Spoon Sampler	2
C. Sleeves, Caps, Seals	2
D. Drilling Procedures	2
E. Soil Sampling Procedure	2
F. Soil Sampling Locations	3
G. Wipe Sampling	3
H. Sampling Log	3
I. Chain of Custody	4
J. Sample Transfer to Laboratory	4
K. Laboratory Analysis	4
L. Photographs	4
III. RESULTS	4
A. Soil	5
1. Metals	5
2. Organics	5
B. Wipe Samples	6
1. Metals	6
2. Organics	6
IV. STATISTICAL ANALYSIS OF METALS	6
A. Introduction	6
B. Statistical Methodology	7

TABLE OF CONTENTS (Cont'd)

	<u>Page</u>
C. Analysis	7
1. Background Area	7
2. 317 Area	8
3. 342 Area	8
4. Burn Area	8
5. Burn Cage Pans and Rails Area	8
6. East Fork Area	8
7. Lead Azide Area	9
V. SUMMARY AND CONCLUSIONS	9

LIST OF TABLES

1. Comparison of Mean Metal Concentrations in Soil with Hazardous Waste Criteria
2. Metal Concentrations at Background Area, 0 - 5 Feet
3. Metal Concentrations at 317 Area, 0 - 2 Feet
4. Metal Concentrations at 317 Area, 16 - 18 Feet
5. Metal Concentrations at 342 Area, 1.5 - 21 Feet
6. Metal Concentrations at Burn Area, 0 - 9 Feet
7. Metal Concentrations at Burn Cage, Pans and Rails Area, 0 - 3 Feet
8. Metal Concentrations at East Fork Area, 0 - 8 Feet
9. Lead Concentrations at Lead Azide Area, 0 - 1 Feet
10. Indicator Parameter Concentrations at Burn Area
11. Indicator Parameter Concentrations at Burn Cage, Pans and Rails Area
12. Indicator Parameter Concentrations at East Fork Detonation Area
13. Organic Compounds Identified at 317 Area, 0 - 2 Feet and 16 - 18 Feet
14. Wipe Sample Results at Building 223 and 236 Metal and Organic Results

LIST OF APPENDICES

- A. Soil Sampling Plan, Dated October 1987
- B. Change to Soil Sampling Plan
- C. Field Sample Log
- D. Chain of Custody Documentation for all Soil and Wipe Samples
- E. Laboratory Reports for all Sample Analysis
- F. List of Appendix VIII Hazardous Constituents Analyzed in the Five Initial Samples
- G. Photographs of Soil and Wipe Sampling

I. INTRODUCTION

The Bermite Division of Whittaker Corporation discontinued operations effective April 3, 1987. In April 1987, a Revised RCRA Closure Plan was submitted to the California Department of Health Services, ("DHS") and U.S. Environmental Protection Agency ("EPA") Region IX for approval. The DHS and EPA approved a modified Closure Plan via their letter of transmittal dated December 28, 1987. The plan specifies the activities required for closure of various RCRA units present at the facility.

The approved RCRA Closure Plan Modifications specified that verification sampling be performed at various RCRA units for the purpose of characterizing the metal and organic compounds possibly present. In partial fulfillment of the approved RCRA Closure Plan, verification sampling and testing of soils and building surfaces at the RCRA units has been completed and is documented in this report. This sampling was performed according to the "Sampling and Analysis Plan for RCRA Units", which was submitted to DHS and EPA on November 10, 1987. The sampling was performed in accordance with the guidelines of the approved Closure Plan Modifications.

The "Sampling and Analysis Plan for RCRA Units" specifies procedures and protocol for soil investigations to be performed at the following RCRA units; 317 former surface impoundment, 342 former surface impoundment, burn cage pans and rails area, burn area and the east fork area. In addition, a sampling area to determine soil background metal concentrations was also selected. Verification sampling and testing at the RCRA units; buildings 223 and 236, and the lead azide wash water treatment unit were also performed per the requirements of the approved Closure Plan Modifications. A copy of the "Sampling and Analysis Plan for RCRA Units" and the pertinent sections of the Closure Plan Modifications pertaining to verification sampling and testing at buildings 223 and 236 and the lead azide area are included as Appendix A.

A modification of the sampling plan for the sample analysis at three of the RCRA units: burn area, burn cage pans and rails area, and the east fork area was requested by Bermite Division, Whittaker Corporation and was approved by DHS on December 9, 1987. The documentation and explanation of this change is included as Appendix B.

The purpose of the verification sampling and testing was to determine if significant levels of hazardous waste or hazardous waste constituents were present in the soils in the vicinity of RCRA units or in the RCRA buildings. An additional requirement was to determine the presence or absence of hazardous constituents as listed in Appendix VIII of 40 CFR 261. This report details the sampling procedures and the analytical results.

The Summary and Conclusions section of this report presents Wenck Associates, Inc.'s professional interpretation of the data developed during the sampling and testing program.

II. SAMPLING AND ANALYSIS PROCEDURES

A. Drilling Rig

The soil samples taken at the RCRA units were obtained by boring with a Mobile B-61 8-inch hollow-stem rotary flight auger. This service was provided by Pioneer Drilling of Redlands, California. The drilling rig was able to reach all predetermined sampling locations to within less than one foot.

B. Split Spoon Sampler

The soil samples were taken with a California-modified split spoon sampler. By this method, samples are obtained by driving the sampler through the middle of the rotary flight auger. The auger is drilled to the elevation of where the sample is to be taken and then the sampler is driven into the soil with a free-falling 140 pound hammer. A blow count was kept of the soil samples taken.

C. Sleeves, Caps, Seals

The sleeves which were used in the split spoon sampler are two inches by six inches and made of stainless steel or brass. Four seals were used on each end of the sleeve. The first seal was teflon, which was covered by a tin foil seal. Plastic end caps were placed over the tin foil and the caps were sealed with electrical tape. The samples were immediately placed on ice in coolers at the site.

D. Drilling Procedures

The borings were drilled according to the procedure described below. The rotary flight auger was steam cleaned prior to drilling each boring. The auger was positioned over the coordinates of the boring to be drilled and was then advanced to the prescribed depth at which the soil samples were taken. When the boring had been completed and all samples from that boring had been taken, the auger was removed from the boring. The cuttings were used to backfill the boreholes.

E. Soil Sampling Procedure

The split spoon sampler was prewashed with deionized water, washed with an aqueous tri-sodium phosphate solution and double rinsed with deionized water prior to each sampling operation. The sampler was loaded with three 2-inch by 6-inch sleeves which also had been washed in the same manner. The sampler was then attached to the drilling rig and was driven to the prescribed depth by the free falling hammer. After the sampler was retrieved, it was opened and the bottom two sleeves from the sampler were removed, sealed, capped, taped and labeled. If the middle sleeve was not required at a sampling location, the soil was discarded and the sleeve was rewashed per protocol.

During the drilling and sampling procedures, a Foxboro organic vapor analyzer (OVA) was used to detect the presence of volatile organics. The OVA was calibrated daily with a methane calibration gas at two concentrations.

F. Soil Sampling Locations

Soil samples were collected from each of the six selected RCRA units and the background area. At the 317 area, samples were collected from two soil horizons, 0-2 feet and 16-18 feet at eight boring locations. The boring locations for the 317 area are shown on Figure 2 of Appendix A. Soil samples from the 342 area were collected at various depths from ten borings as shown on Figure 3 of Appendix A. Seven borings with ten samples per boring from the surface to nine feet were collected at the burn area. The boring locations of the burn area is presented in Figure 5 of Appendix A. Twelve borings with four samples per boring from the surface to three feet were collected at the burn cage, pans and rails area. The boring locations for the burn cage, pans and rails area are presented in Figure 4 in Appendix A. Soil samples from the east fork area were collected from six borings with nine samples per boring at depths to eight feet. Boring locations for the east fork area are presented in Appendix A, Figure 6. Soils were sampled at the lead azide area beneath the containment structure after removal of the structure and concrete. Three borings with samples from 0-6 inches and 6-12 inches were taken at this area. Soil samples were also collected from four borings with six sampling depths at a background area on the Bermite facility. The background boring locations are shown on Figure 7 of Appendix A.

G. Wipe Sampling

Wipe samples were taken on the inside surfaces of buildings 223 and 236 in accordance with the approved Closure Plan Modifications. These samples were taken for metal and organic analyses. A copy of the pertinent sections of these modifications is included in Appendix A.

The samples were taken in the manner and location specified in the Closure Plan Modifications. Laboratory grade acetone and deionized water were used to saturate the cheesecloth and filter paper sampling medium. The sample areas were measured and outlined with masking tape for purposes of sampling one square foot for each sample.

The wipe samples were collected by wiping the surface completely with the filter paper or cheesecloth (as appropriate for the metals or organic analysis) and then placing the samples into a laboratory cleaned and supplied glass jar. The jar was then sealed, labeled and placed into a cooler for transport to the laboratory. Sampling gloves were worn to prevent cross-contamination.

H. Sampling Log

A log was kept of all soil and wipe samples taken. This log included the blow count for each soil sample, the time, the date and weather observations. Also included were OVA readings taken at selected borings during the sampling procedure. No OVA readings above background levels were detected at any of the borings except at a few selected borings at the 317 area. The field sampling log is included as Appendix C.

I. Chain of Custody

Chain of custody documentation was kept for each sample obtained. Chain of custody documentation includes the time, date, identification and required analyses for each sample. The chain of custody documentation for each sample is included as Appendix D. The chain of custody documentation was kept with the samples from the time of collection until the samples were delivered to the laboratory.

J. Sample Transfer to Laboratory

Samples were labeled and immediately placed in coolers which were kept at 4° C ice packs or bags of ice. The samples were either transferred to a refrigerator at the Bermite office until delivery to the laboratory or were transferred directly to the laboratory in the coolers. If the samples were kept overnight in the refrigerator, they were placed back into the cooler for transfer to the laboratory. When the samples reached the laboratory they were immediately transferred to refrigerators at the laboratory. The time of delivery from Bermite to the laboratory was between 45 and 120 minutes.

K. Laboratory Analysis

All soil samples were analyzed as specified in the approved Closure Plan Modifications. Analytical procedures were performed in accordance with the appropriate sections of EPA SW 846 Test Methods for Evaluating Solid Waste, Third Edition. The analyses which were performed on the samples were: EPA Method 8240 GCMS for volatile organics; EPA Method 8270 GCMS for semi-volatile organics; atomic absorption by either direct aspiration or the furnace technique for metals; and various methods for the compounds on the Appendix VIII list which are identified on the laboratory reports included as Appendix E.

FGL Environmental of Santa Paula, California and Centrum Analytical of Redlands, California performed all the analytical work.

QA/QC analysis was performed by the laboratories as directed in the approved Closure Plan Modifications. Documentation of this analysis is included with the laboratory reports included as Appendix E and Appendix F.

L. Photographs

Photographs taken during the soil sampling and the verification wipe sampling are included as Appendix G.

III. RESULTS

This section presents the results of soil sampling and wipe sampling conducted at the selected RCRA units.

A. Soils

1. Metals

Soil samples collected from the previously described locations with the exception of the lead azide area were analyzed for metal constituents, arsenic, barium, cadmium, chromium, copper, lead, mercury, selenium and silver. Lead was analyzed for in samples from the lead azide area. The results from the metal analyses have been summarized on Table 1. The results of individual sample analyses are presented in Tables 2 through 9.

The concentrations of metals analyzed in the soils at the selected RCRA units are within the Total Threshold Limit Concentrations (TTLC) as established in the State of California Health and Safety Code, Title 22, Article 11, Section 66699. The TTLC criteria are used to define if a soil/waste is hazardous. A comparison of the average metal concentration at the RCRA units with the California Hazardous Waste Criteria is presented in Table 1. As shown in the table, the average metal concentrations in the soils at the RCRA units are generally one to two orders of magnitude less than the criteria that establish hazardous levels for soils.

Boron, fluoride, and magnesium were also analyzed for in samples collected from the burn area, burn cage pans and rails area and the east fork area. These constituents were analyzed as indicator parameters in accordance with the approved Closure Plan Modifications. The results of the indicator parameter analyses are presented in Tables 10 through 12. Boron and magnesium were consistently detected at these RCRA units. There are no TTLC criteria established for boron and magnesium in the State of California Health and Safety Code. Fluoride was detected in the samples from the burn cage pans and rails area and the east fork area. The TTLC for fluoride is 18,000 parts per million (ppm). The average fluoride concentrations at the burn cage pans and rail area and the east fork area were 276 ppm and 294 ppm, respectively, approximately 70 times below the TTLC.

2. Organics

Organic compounds were analyzed in accordance with the approved Closure Plan Modifications. The RCRA units sampled for organics were the 317 area, the burn area, burn cage pans and rails area and the east fork area. The results of these organic analysis are indicated below. The organic compounds were analyzed by two EPA Methods, 8240 and 8270.

Volatile organic compounds were analyzed in samples from the two soil horizons 0-2 feet and 16-18 feet at the 317 area per the approved Closure Plan Modifications. The identified compounds are tabulated on Table 13. The results have been incorporated with results of the on-going activities at the 317 area which are detailed in a separate report entitled, "Progress Report of Soil Characterization at the 317 Area", March 1988. The borings in which these compounds were detected are presented in Figure 2 in Appendix A.

In accordance with the modification to the sampling plan, 20 percent of the samples collected at the burn area, burn cage pans and rails area, and east fork area, were analyzed for diphenylamine, butyl carbitol, dibutyl phthalate, diphenyl guanadine, and quinone by EPA Method 8270. None of the five organic compounds were detected in any of the samples analyzed. The laboratory reports of these analyses are included in Appendix D.

In addition, samples from each of the five RCRA units - 317 area, 342 area, burn area, burn cage pans and rails area and the east fork area - were taken and analyzed for the Appendix VIII organic compounds that were identified as possibly being present in the soils at these RCRA units. The Appendix VIII organics compounds tested for include:

Benzene	Formaldehyde
Butyl Acetate	Hexachloroethane
Carbon Disulfide	Isobutyl Alcohol
Chloroform	Methyl Ethyl Ketone
Dichloromethane	Methyl Methacrylate
Dinitrobenzene	Toluene
Diphenylamine	1,1,1-Trichloroethane

The compounds were analyzed by the appropriate EPA method or industry standardized method. The laboratory reports shown in Appendix F indicate the method of analysis.

Three organic compounds from the Appendix VIII list were detected in the samples from the 317 area: 1,1,1-Trichloroethane, Methyl Ethyl Ketone and Carbon Disulfide. 1,1,1-Trichloroethane and Methyl Ethyl Ketone were known to have been used at the 317 area. Carbon Disulfide is considered a laboratory contaminant.

B. Wipe Samples

1. Metals

Results of wipe tests from buildings 223 and 236 are shown in Table 14. Wipe samples from a background area were also collected and analyzed. This area was formerly an office area near the present Bermite offices. It has been abandoned since the facility was closed. Lead, magnesium and boron were analyzed for in the wipe samples. Metal results of wipe samples from Buildings 223 and 236 are within the range of concentrations of the background location metal concentrations.

2. Organics

The wipe samples collected from buildings 223 and 236 were analyzed for the organic compounds dibutyl phthalate and diphenylamine. Wipe samples from the buildings did not detect these organic compounds. Results of wipe sampling are presented in Table 14.

IV. STATISTICAL ANALYSIS OF RESULTS

A. Introduction

The analytical results for each of the RCRA units have been tabulated and are presented on Tables 2 through 9. For each set of metal concentrations at each RCRA unit, statistical analyses are listed in each table. These statistics are then used to compare the average concentrations of the metals at the RCRA units with the average concentrations as determined in the background area sampling.

B. Statistical Methodology

The tabulated results of the metals analyzed at the selected RCRA units have been statistically analyzed and results are shown in Tables 2 through 9. The mean of the metals concentrations for each constituent has been calculated along with upper and lower 95 percent confidence levels about the mean. For purposes of data handling in the statistical procedures, non-detectable concentrations were assumed to be equal to the detection limit. The standard deviation and variance of each constituent has been calculated based on n-1 degrees of freedom, where n is the number of samples used in the calculation. A t* test statistic was calculated for each constituent using the method presented in Principles and Procedures of Statistics, Section 5.8 (Steel and Torrie, 1960) in accordance with the approved Closure Plan Modifications. The calculation for t* is shown below.

$$t^* = (X_1 - X_2)/S_d$$

where X_1 = mean concentration from RCRA unit

X_2 = mean concentration from background area

$$S_d = \left(\frac{S^2_1}{n_1} + \frac{S^2_2}{n_2} \right)^{1/2}$$

where S^2 = sample variance from RCRA unit

S^2_2 = sample variance from background area

n_1 = number of samples from RCRA unit

n_2 = number of samples from background area

A value for t', for which to determine a significant value for t*, was obtained from a standard T-statistic table at the 95 percent confidence level for a one-tailed test using n-1 degrees of freedom when n_1 is approximately equal to n_2 . If the difference between n_1 and n_2 is large, then t' is calculated as shown below.

$$t' = \frac{(s_1^2/n_1)t_1 + (S^2_2/n_2)t_2}{(s_1^2/n_1) + (S^2_2/n_2)}$$

where t_1 = tabular t value for $n_1 - 1$ degrees of freedom

t_2 = tabular t value for $n_2 - 1$ degrees of freedom

The t* statistic is compared against t' value. If t* is greater than t', then the mean metal concentration from the RCRA unit is not statistically equivalent to the mean metal concentration from the background area.

C. Analysis

1. Background Area

Soil samples were taken for determination of background metal concentrations at the Bermite facility. The boring locations can be seen on Figure 7 of Appendix A. Four borings with six samples per boring were taken at this area. The background metal concentrations determined are tabulated on Table 2.

2. 317 Area

Samples for metal analysis were taken at two soil horizons, 0-2 feet and 16-18 feet. The soil boring locations are presented on Figure 2 of Appendix A. The tabulation of the analysis results are presented on Tables 3 and 4.

As indicated in tables 3 and 4 no metal concentrations at the 317 area statistically vary from the background area concentrations.

3. 342 Area

Soil Samples for metal analysis were taken at the depths specified in the approved Closure Plan Modifications. Earlier sampling results from July 1987 have been combined with the verification sampling and are tabulated on Table 5.

As indicated in Table 5 no metal concentrations at the 342 area statistically vary from the background area concentrations.

4. Burn Area

Seven borings with ten samples per boring from the surface to nine feet were taken at this area. The analytical results are tabulated on Table 6. The boring locations can be seen on Figure 5 in Appendix A.

Barium, cadmium and lead average concentrations vary from the background averages. The average barium concentration at the burn area is 131 ppm versus 52 ppm in the background, well below the TTLC for barium of 10,000 ppm. The average barium concentration is impacted as a result of a barium value of 2250 ppm for one sample. The average cadmium concentration is 1.0 ppm versus 0.5 ppm in the background, well below the TTLC for cadmium of 100 ppm. The average lead concentration is 22 ppm versus 3.7 ppm in the background, well below the TTLC for lead of 1,000 ppm.

5. Burn Cage Pans and Rails Area

Twelve borings with four samples per boring from the surface to three feet were taken at this area. The results are tabulated in Table 7. The boring locations can be seen on Figure 4 of Appendix A.

Barium, cadmium, copper and lead average concentrations vary from the background averages. Barium concentrations averaged 91 ppm versus 52 ppm at the background, well below the TTLC of 10,000 ppm. Cadmium concentrations averaged 0.8 ppm versus 0.5 ppm at the background, well below the TTLC of 100 ppm. Copper concentrations averaged 20 ppm versus 6 ppm at the background, well below the TTLC for copper of 2,500 ppm. Lead concentrations averaged 18 ppm versus 3.7 ppm at the background, well below the TTLC of 1,000 ppm.

6. East Fork Area

Six borings with nine samples per boring from the surface to eight feet were taken at this area. The analytical results are tabulated in Table 6. The boring locations are presented on Figure 8 in Appendix A.

Cadmium and lead have average concentrations that vary from the background averages. Cadmium averaged 3.4 ppm versus 0.5 ppm for background, well below the TTLC of 100 ppm. Lead averaged 10.9 ppm versus 3.7 ppm for background, well below the TTLC of 1000 ppm for lead.

7. Lead Azide Area

The containment structure and all concrete was removed from this area and disposed of as hazardous waste. This option was chosen over increased verification sampling. Verification soil samples were taken beneath the concrete that was removed. Three borings with samples from 0-6 inches and 6-12 inches were taken at this area. The samples were analyzed for total lead. The results of these analysis are tabulated on Table 9. Lead was not detected in the six samples taken from this area.

V. SUMMARY AND CONCLUSIONS

Metal concentrations in the soils at the RCRA units are within the Total Threshold Limit Concentrations (TTLC) established in the California Health and Safety Code (Title 22, Article 11, Sec. 66699). The TTLC criteria are used to determine if a soil/waste is hazardous. Metal concentrations in the soil at the RCRA Units are at least 50 times less than the TTLC's. Therefore the soils at the RCRA units are not hazardous with respect to metals as defined in the California Health and Safety Code Title 22 Article 11, Sec. 66699.

Metal concentrations in the soils at the 317 and 342 areas and lead azide area were found to be statistically within background limits. Concentrations of selected metals in the soils at the burn area, burn cage pans and rails area, and east fork area were found to statistically vary from the background concentrations. Cadmium and lead statistically varied from background at the three RCRA units listed above, while barium varied from background in the burn area and burn cage pans and rails area. Copper was found to statistically vary from background at the burn cage pans and rails area. While these soils have average metal concentrations above the background area metal concentrations, the averages are at least 50 times less than the TTLC established for each of these metals.

Appendix VIII hazardous constituents were analyzed for the soils from the RCRA units 342 area, burn area, burn cage pan and rails area and the east fork area and were found to be non-detectable. Two Appendix VIII organic compounds, 1,1,1-Trichloroethane and Methyl Ethyl Ketone, were identified at the 317 area. The 317 area results are detailed in a separate report entitled "Progress Report of Soil Characterization at the 317 Area", March 1988.

The soils at the RCRA units have been shown to be non-hazardous with respect to metal concentrations and Appendix VIII hazardous constituents, and therefore no remedial measures at the RCRA units 342 area, burn area, burn cage pans and rails area, east fork area, and lead azide area are indicated.

The 342 area and lead azide area do not have metal concentrations that statistically vary from background and none of the specified organic materials were detected. These RCRA units can, therefore, be clean closed.

Extensive wipe sample tests were conducted at Buildings 223 and 236 and in a directed background area for comparison purposes. Results from the wipe samples demonstrate that the buildings are completely free of organics and metals. These buildings can, therefore, be closed clean and require no further action.

Soils in three other areas identified in the closure plan were also subjected to extensive and rigorous testing and sampling. These three areas, the burn area, burn cage pans and rails, and east fork area, while showing the presence of copper, barium, cadmium, and lead at levels statistically above background concentrations, are from one-thirtieth to one/one hundred twenty-fifth of the total threshold limit concentration (TTL) level specified in the California Health and Safety Code.

Because of these extremely low levels in relation to recognized action levels, these areas, too, it is clear, pose no threat to health and human safety or to the environment and should be clean closed.

TABLE 1

COMPARISON OF MEAN METAL CONCENTRATIONS IN SOIL WITH
HAZARDOUS WASTE CRITERIA

<u>Substance*</u>	<u>TTL</u> <u>(mg/kg)</u>	<u>317</u> <u>0-2'</u>	<u>317</u> <u>16-18'</u>	RCRA UNIT		<u>BCPR</u> <u>Area</u>	<u>East</u> <u>Fork</u>	<u>Lead</u> <u>Azide</u>
				<u>342</u> <u>---</u>	<u>Burn</u> <u>Area</u>			
Arsenic	500	3.6	<2	4.9	2.9	4.9	4.9	--
Barium	10,000	29	53	50	131	91	51	--
Cadmium	100	<0.5	<2	<0.5	1.0	0.8	3.4	--
Chromium	500	<50	17	<50	29	<50	<50	--
Copper	2,500	--	--	<10	--	20	10.2	--
Fluoride	18,000	--	--	--	<2	280	300	--
Lead	1,000	4.1	3.6	4.5	22	18	10.9	<4
Mercury	20	<0.1	<0.2	<0.1	<0.2	<0.1	<0.1	--
Selenium	100	<0.5	<1	<0.5	<1	<0.5	<0.5	--
Silver	500	<3	0.5	<3	2.5	<3	<3	--

Concentrations shown above are in mg/kg

Concentrations for RCRA units are calculated means (see Tables 2-9)

TTL = Total Threshold Limit Concentration (mg/kg) in Soil, Sec. 66699,
Article 11, Pg. 1800.77 - Title 22 California Health & Safety Code

BCPR = Burn cage pans and rails area

ANAL RESULTS FROM
SOIL SAMPLING AT
RCRA UNITS

TABLE 2

File = BACKGSDIL

BACKGROUND AREA METAL CONCENTRATIONS

All Values Are mg/kg (ppm)

SAMPLE I.D.	SAMPLE DEPTH	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Copper	Flouride	Lead	Magnesium	Mercury	Nickel	Selenium	Silver	Thallium
BGA-2323-1	0.0-0.5'	ND	4.0	50	ND	ND	ND	5100	ND	ND	ND	4.0	1400	ND	ND	ND	ND	ND
BGA-2323-2	0.5-1.0'	ND	3.0	ND	ND	ND	ND	3100	ND	ND	340	ND	1100	ND	ND	ND	ND	ND
BGA-2323-3	1.0-2.0'	ND	5.0	76	ND	7.0	ND	3100	ND	ND	ND	ND	3300	ND	20	ND	ND	ND
BGA-2323-4	2.0-3.0'	ND	ND	ND	ND	ND	ND	1500	ND	ND	ND	ND	960	ND	ND	ND	ND	ND
BGA-2323-5	3.0-4.0'	ND	4.0	ND	ND	ND	ND	1800	ND	ND	170	ND	1200	ND	ND	ND	ND	ND
BGA-2323-6	4.0-5.0'	ND	ND	ND	ND	ND	ND	1600	ND	ND	180	ND	1200	ND	ND	ND	ND	ND
BGA-2822-1	0.0-0.5'	ND	5.0	53	ND	6.0	ND	6200	ND	ND	420	4.0	1700	ND	ND	ND	ND	ND
BGA-2822-2	0.5-1.0'	ND	4.0	ND	ND	ND	ND	4300	ND	ND	180	12	1400	ND	ND	ND	ND	ND
BGA-2822-3	1.0-2.0'	ND	4.0	ND	ND	ND	ND	2200	ND	ND	130	ND	1700	ND	ND	ND	ND	ND
BGA-2822-4	2.0-3.0'	ND	ND	ND	ND	ND	ND	2100	ND	ND	160	ND	1100	ND	ND	ND	ND	ND
BGA-2822-5	3.0-4.0'	ND	5.0	ND	ND	ND	ND	1700	ND	ND	160	ND	1300	ND	ND	ND	ND	ND
BGA-2822-6	4.0-5.0'	ND	6.0	ND	ND	ND	ND	2000	ND	ND	110	ND	1600	ND	ND	ND	ND	ND
BGA-0115-1	0.0-0.5'	ND	5.0	52	ND	6.0	ND	4500	ND	23	390	4.0	1500	ND	ND	ND	ND	ND
BGA-0115-2	0.5-1.0'	ND	4.0	64	ND	7.4	ND	5700	ND	ND	180	4.0	1900	ND	ND	ND	ND	ND
BGA-0115-3	1.0-2.0'	ND	4.0	ND	ND	8.2	ND	5300	ND	14	380	4.0	2100	ND	ND	ND	ND	ND
BGA-0115-4	2.0-3.0'	ND	5.0	56	ND	9.0	ND	3400	ND	ND	ND	4.0	2300	ND	ND	ND	ND	ND
BGA-0115-5	3.0-4.0'	ND	4.0	ND	ND	ND	ND	2100	ND	ND	160	4.0	1100	ND	ND	ND	ND	ND
BGA-0115-6	4.0-5.0'	ND	6.0	ND	ND	ND	ND	1800	ND	ND	120	ND	1200	ND	ND	ND	ND	ND
BGA-1223-1	0.0-0.5'	ND	5.0	ND	ND	6.0	ND	3600	ND	ND	ND	ND	1600	ND	ND	ND	ND	ND
BGA-1223-2	0.5-1.0'	ND	6.0	ND	ND	6.0	ND	2100	ND	ND	270	ND	1400	ND	ND	ND	ND	ND
BGA-1223-3	1.0-2.0'	ND	6.0	ND	ND	ND	ND	1600	ND	ND	ND	ND	1500	ND	ND	ND	ND	ND
BGA-1223-4	2.0-3.0'	ND	5.0	ND	ND	ND	ND	1500	ND	ND	260	ND	1200	ND	ND	ND	ND	ND
BGA-1223-5	3.0-4.0'	ND	5.0	ND	ND	ND	ND	1900	ND	ND	ND	ND	1400	ND	ND	ND	ND	ND
BGA-1223-6	4.0-5.0'	ND	6.0	ND	ND	ND	ND	2000	ND	ND	ND	ND	1700	ND	ND	ND	ND	ND
Detection Limit		10	3.0	50	0.50	5.0	0.50	1000	50	10	100	3.0	500	0.10	10	0.50	3.0	5.0
Average Concentration		10	4.6	52	0.50	5.7	0.50	2925	50	11	184	3.7	1536	0.10	10	0.50	3.0	5.0
Upper Confidence Limit		10	4.9	54	0.50	6.0	0.50	3445	50	12	220	4.3	1710	0.10	11	0.50	3.0	5.0
Lower Confidence Limit		10	4.2	50	0.50	5.3	0.50	2405	50	10	148	3.0	1361	0.10	9.7	0.50	3.0	5.0
Standard Deviation		0.0	1.0	5.9	0.00	1.1	0.00	1487	0	2.7	103	1.8	499	0.00	2.0	0.00	0.0	0.0
Variance		0.0	1.0	35	0.00	1.3	0.00	2210652	0	7.5	10651	3.4	248730	0.00	4.2	0.00	0.0	0.0
Coefficient of Variation		0.0	22	11	0.00	20	0.00	51	0	26	56	50	32	0.00	20	0.00	0.0	0.0
Maximum Value		ND	6.0	76	ND	9.0	ND	6200	50	23	420	12	3300	ND	20	ND	ND	ND
Total Number of Samples		24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24

NOTE:

- 1) All No Detection Values (ND) Have Been Given A Value
Equal To The Detection Limit For Purposes Of Calculation
2) t = 1.714 in calculation of confidence limits

18-Mar-88

WENCK ASSOCIATES, INC.

ANALYSIS RESULTS FROM
SOIL SAMPLING AT
RCRA UNITS

TABLE 3

FILE = 317DATAF

METAL CONCENTRATIONS AT 317 AREA, 0 TO 2 FEET
All Values Are mg/kg (ppm)

SAMPLE I.D.	SAMPLE DEPTH	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
317-3369-1	0.0-0.5'	4.0	ND	ND	ND	6.0	ND	ND	ND
317-3369-2	0.5-1.0'	ND	ND	ND	ND	4.0	ND	ND	ND
317-3369-3	1.5-2.0'	5.0	ND	ND	ND	6.0	ND	ND	ND
317-3752-1	0.0-0.5'	5.0	ND	ND	ND	4.0	ND	ND	ND
317-3752-2	0.5-1.0'	4.0	ND	ND	ND	4.0	ND	ND	ND
317-3752-3	1.5-2.0'	3.0	ND	ND	ND	4.0	ND	ND	ND
317-0745-1	0.0-0.5'	4.0	ND	ND	ND	4.0	ND	ND	ND
317-0745-2	0.5-1.0'	3.0	ND	ND	ND	4.0	ND	ND	ND
317-0745-3	1.5-2.0'	ND	ND	ND	ND	ND	ND	ND	ND
317-6089-1	0.0-0.5'	4.0	ND	ND	ND	4.0	ND	ND	ND
317-6089-2	0.5-1.0'	ND	ND	ND	ND	ND	ND	ND	ND
317-6089-3	1.5-2.0'	3.0	ND	ND	ND	ND	ND	ND	ND
317-2092-1	0.0-0.5'	3.0	ND	ND	ND	4.0	ND	ND	ND
317-2092-2	0.5-1.0'	4.0	58	ND	ND	4.0	ND	ND	ND
317-2092-3	1.5-2.0'	ND	ND	ND	ND	4.0	ND	ND	ND
317-1397-1	0.0-0.5'	ND	ND	ND	ND	4.0	ND	ND	ND
317-1397-2	0.5-1.0'	5.0	ND	ND	ND	4.0	ND	ND	ND
317-1397-3	1.5-2.0'	3.0	ND	ND	ND	6.0	ND	ND	ND
317-6331-1	0.0-0.5'	4.0	54	ND	ND	4.0	ND	ND	ND
317-6331-2	0.5-1.0'	4.0	ND	ND	ND	ND	ND	ND	ND
317-6331-3	1.5-2.0'	ND	ND	ND	ND	4.0	ND	ND	ND
317-7573-1	0.0-0.5'	3.0	54	ND	ND	4.0	ND	ND	ND
317-7573-2	0.5-1.0'	4.0	ND	ND	ND	4.0	ND	ND	ND
317-7573-3	1.5-2.0'	3.0	ND	0.60	ND	4.0	ND	ND	ND
Detection Limit		3.0	50	0.50	50	3.0	0.10	0.50	3.0
Sample Average Concentration		3.6	51	0.50	50	4.1	0.10	0.50	3.0
Upper Confidence Limit		3.8	51	0.50	50	4.4	0.10	0.50	3.0
Lower Confidence Limit		3.3	50	0.50	50	3.8	0.10	0.50	3.0
Sample Standard Deviation		0.7	1.9	--	--	0.8	--	--	--
Sample Variance		0.5	3.7	--	--	0.7	--	--	--
Coefficient of Variation		20.0	3.8	--	--	20	--	--	--
Maximum Value		5.0	58	0.60	ND	6.0	ND	ND	ND
Total Number of Samples		24	24	24	24	24	24	24	24

18-Mar-88

WENCK ASSOCIATES, INC.

ANALYSIS RESULTS FROM
SOIL SAMPLING AT
RCRA UNITS

TABLE 3

FILE = 317DATAF

METAL CONCENTRATIONS AT 317 AREA, 0 TO 2 FEET
All Values Are mg/kg (ppm)

SAMPLE I.D.	SAMPLE DEPTH	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
Background Average		4.6	52	0.50	50	3.7	0.10	0.50	3.0
Background Variance		1.0	35	0.00	0	3.4	0.00	0.00	0.0
t* = test statistic		-3.9	-1.2			1.0			
t'		1.7	1.7			1.7			

NOTE:

All No Detection (ND) values have been
given a value equal to the detection limit
for purposes of calculation

Std Dev. and Var. are based on n - 1

$$t* = (\text{sample avg.} - \text{background avg.}) / \sqrt{(\text{sample var.} / \# \text{ samples}) + \text{background var.} / \# \text{ samples}}$$

If $t* > t'$ then sample avg. \neq background avg.

ANALYSIS RESULTS FROM
SOIL SAMPLING AT
RCRA UNITS

TABLE 4

File = 317met16

METAL CONCENTRATIONS AT 317 AREA, 16 TO 18 FEET
All Values Are ng/kg (ppm)

SAMPLE I.D.	SAMPLE DEPTH	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
317-3369-4	16.0-16.5'	ND	52	ND	ND	ND	ND	ND	ND
317-3369-5	16.5-17.0'	ND	59	ND	22	ND	ND	ND	ND
317-3369-6	17.5-18.0'	ND	73	ND	250	ND	ND	ND	ND
317-3752-4	16.0-16.5'	ND	30	ND	7	ND	ND	ND	0.43
317-3752-5	16.5-17.0'	ND	43	ND	6	ND	ND	ND	ND
317-3752-6	17.5-18.0'	ND	39	ND	ND	ND	ND	ND	ND
317-0745-4	16.0-16.5'	ND	47	ND	ND	ND	ND	ND	ND
317-0745-5	16.5-17.0'	ND	36	ND	ND	ND	ND	ND	ND
317-0745-6	17.5-18.0'	ND	40	ND	ND	ND	ND	ND	ND
317-6089-4	16.0-16.5'	ND	69	ND	ND	ND	ND	ND	ND
317-6089-5	16.5-17.0'	ND	32	ND	7	ND	ND	ND	ND
317-6089-6	17.5-18.0'	ND	ND	ND	ND	ND	ND	ND	ND
317-2092-4	16.0-16.5'	ND	62	ND	6	ND	ND	ND	ND
317-2092-5	16.5-17.0'	ND	55	ND	6	ND	ND	ND	1.7
317-2092-6	17.5-18.0'	ND	66	ND	ND	ND	ND	ND	ND
317-1397-4	16.0-16.5'	ND	33	ND	6	ND	ND	ND	ND
317-1397-5	16.5-17.0'	ND	53	ND	8	ND	ND	ND	ND
317-1397-6	17.5-18.0'	ND	60	ND	5	ND	ND	ND	ND
317-6331-4	16.0-16.5'	ND	57	ND	ND	12	ND	ND	ND
317-6331-5	16.5-17.0'	ND	67	ND	ND	9.0	ND	ND	0.45
317-6331-6	17.5-18.0'	ND	78	ND	ND	ND	ND	ND	ND
317-7573-4	16.0-16.5'	ND	76	ND	8	ND	ND	ND	ND
317-7573-5	16.5-17.0'	ND	32	ND	7	ND	ND	ND	ND
317-7573-6	17.5-18.0'	ND	63	ND	6	ND	ND	ND	ND
Detection Limit		2.0	20	2.0	5	5.0	0.20	1.0	0.40
Sample Average Concentration		2.0	53	2.0	17	3.6	0.20	1.0	0.46
Upper Confidence Limit		2.0	58	2.0	34	4.3	0.20	1.0	0.55
Lower Confidence Limit		2.0	48	2.0	-0.8	2.9	0.20	1.0	0.37
Sample Standard Deviation		--	15	--	50	2.1	--	--	0.26
Sample Variance		--	221	--	2483	4.3	--	--	0.07
Coefficient of Variation		--	28	--	300	58	--	--	57
Maximum Value		ND	78	ND	250	12	ND	ND	1.7
Total Number of Samples		24	24	24	24	24	24	24	24

18-Mar-88

WENCK ASSOCIATES, INC.

ANALYSIS RESULTS FROM
SOIL SAMPLING AT
RCRA UNITS

TABLE 4

File = 317met16

METAL CONCENTRATIONS AT 317 AREA, 16 TO 18 FEET
All Values Are mg/kg (ppm)

SAMPLE I.D.	SAMPLE DEPTH	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
Background Average		4.6	52	0.50	50	3.7	0.10	0.50	3.0
Background Variance		1.0	35	0.00	0	3.4	0.00	0.00	0.0
t* = test statistic			0.3		-3.3	-0.1			-48
t'			1.7		1.7	1.7			1.7

Note:

All No Detection Values (ND) Have Been Given A Value
Equal To The Detection Limit For Purposes Of Calculation

Std Dev. and Var. are based on n -1

$t* = (\text{sample avg.} - \text{background avg.}) / \sqrt{((\text{sample var.} / \# \text{ samples}) + \text{background var.} / \# \text{ samples})}$

If $t* > t'$ then sample avg. \neq background avg.

ANALYSIS RESULTS FROM
SOIL SAMPLING AT
RCRA UNITS

TABLE 5

File = 342AREADATA

342 AREA - METAL CONCENTRATIONS
All Values Are ug/kg (ppm)

SAMPLE I.D.	SAMPLE Depth	Arsenic	Barium	Cadmium	Chromium	Copper	Lead	Mercury	Selenium	Silver
342-9955-2	1.5-2.0'	5.0	ND	ND	ND	ND	4.0	ND	ND	ND
342-9955-4	17.5-18.0'	6.0	ND	ND	ND	ND	4.0	ND	ND	ND
342-9619-2	1.5-2.0'	8.0	ND	ND	ND	ND	6.0	ND	ND	ND
342-9619-4	17.5-18.0'	9.0	ND	ND	ND	ND	6.0	ND	ND	ND
342-2006-2	1.5-2.0'	8.0	ND	ND	ND	ND	4.0	ND	ND	ND
342-2006-4	17.5-18.0'	ND	ND	ND	ND	ND	4.0	ND	ND	ND
342-2045-2	1.5-2.0'	5.0	ND	ND	ND	ND	4.0	ND	ND	ND
342-2045-4	17.5-18.0'	6.0	55	ND	ND		ND	ND	ND	ND
342-1333-2	1.5-2.0'	9.0	67	ND	ND	ND	6.0	ND	ND	ND
342-1333-4	1.5-2.0'	5.0	ND	ND	ND	ND	4.0	ND	ND	ND
BH-5	15.5-16.0'	3.0	37	ND	15		4.0	ND	ND	ND
	20.0-20.5'	3.0	30	ND	12		4.2	ND	ND	ND
BH-6	16.5-17.0'	5.0	120	ND	21		6.9	ND	ND	ND
	20.5-21.0'	3.0	38	ND	10		4.0	ND	ND	ND
BH-7	15.5-16.0'	3.0	21	ND	10		2.9	ND	ND	15
	20.5-21.0'	4.0	73	ND	21		7.0	ND	ND	ND
BH-8	15.5-16.0'	4.0	36	ND	16		5.4	ND	ND	ND
	20.5-21.0'	3.0	26	ND	14		3.2	ND	ND	ND
BH-9	15.5-16.0'	5.0	51	ND	17		6.1	ND	ND	ND
	20.5-21.0'	4.0	40	ND	17		4.5	ND	ND	ND
Detection Limit		3.0	50	0.50	50	10	4.0	0.10	0.50	3.0
Sample Average Concentration		4.9	50	0.50	50	10	4.5	0.10	0.50	3.0
Upper Confidence Limit		5.8	50	0.50	50	10	5.1	0.10	0.50	3.0
Lower Confidence Limit		4.0	50	0.50	50	10	3.9	0.10	0.50	3.0

ANALYSIS RESULTS FROM
SOIL SAMPLING AT
RCRA UNITS

TABLE 5

File = 342AREADATA

342 AREA - METAL CONCENTRATIONS

All Values Are mg/kg (ppm)

SAMPLE I.D.	SAMPLE Depth	Arsenic	Barium	Cadmium	Chromium	Copper	Lead	Mercury	Selenium	Silver
Sample Standard Deviation		2.3	--	--	--	--	1.6	--	--	--
Sample Variance		5.3	--	--	--	--	2.6	--	--	--
Coefficient of Variation		47	--	--	--	--	36	--	--	--
Maximum Value		9.0	120	ND	21	ND	7.0	ND	ND	15
Total Number of Samples		20	20	20	20	9	20	20	20	20
Background Average		4.6	52	0.50	50	11	3.7	0.10	0.50	3.0
Background Variance		1.0	35	0.00	0	8	3.4	0.00	0.00	0.0
t*		0.6					1.6			
t'		1.7					1.7			

NOTE:

All No Detection (ND) Values have been
given a value equal to the detection limit
for purposes of calculation

Std Dev. and Var. based on n-1

$$t^* = (\text{sample avg.} - \text{background avg.}) / \sqrt{(\text{sample var.} / \# \text{ samples}) + \text{background var.} / \# \text{ samples}}$$

If $t^* > t'$ then sample avg. \neq background avg.

ANALYSIS RESULTS FROM
SOIL SAMPLING AT
RCRA UNITS

TABLE 6

File = BAD1

BURN AREA - METAL CONCENTRATIONS

All Values Are mg/kg (ppm)

SAMPLE I.D.	SAMPLE Depth	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
BA-10737-1	0.0-0.5'	ND	73	ND	14	8.1	ND	ND	ND
BA-10737-2	0.5-1.0'	ND	75	ND	14	14	ND	ND	ND
BA-10737-3	1.5-2.0'	ND	68	ND	13	27	ND	ND	0.80
BA-10737-4	2.5-3.0'	ND	78	ND	15	12	ND	ND	ND
BA-10737-5	3.5-4.0'	2.0	65	ND	14	22	ND	ND	ND
BA-10737-6	4.5-5.0'	ND	55	ND	10	17	ND	ND	ND
BA-10737-7	5.5-6.0'	ND	69	ND	12	15	ND	ND	0.41
BA-10737-8	6.5-7.0'	ND	63	ND	14	16	ND	ND	ND
BA-10737-9	7.5-8.0'	ND	204	ND	22	8.7	ND	ND	ND
BA-10737-10	8.5-9.0'	ND	28	ND	20	ND	ND	ND	ND
BA-6833-1	0.0-0.5'	ND	89	ND	17	22	ND	ND	ND
BA-6833-2	0.5-1.0'	2.2	60	ND	15	17	ND	ND	ND
BA-6833-3	1.5-2.0'	2.0	84	ND	21	35	ND	ND	0.44
BA-6833-4	2.5-3.0'	ND	94	ND	18	60	ND	ND	1.3
BA-6833-5	3.5-4.0'	2.1	71	ND	14	7.1	ND	ND	ND
BA-6833-6	4.5-5.0'	2.7	101	ND	17	52	ND	ND	7.4
BA-6833-7	5.5-6.0'	ND	168	ND	34	46	ND	ND	ND
BA-6833-8	6.5-7.0'	ND	158	2.3	38	50	ND	ND	0.77
BA-6833-9	7.5-8.0'	ND	ND	ND	7	ND	ND	ND	ND
BA-6833-10	8.5-9.0'	ND	54	2.7	12	ND	ND	ND	ND
BA-6125-1	0.0-0.5'	2.1	39	ND	13	ND	ND	ND	0.44
BA-6125-2	0.5-1.0'	ND	64	ND	16	59	ND	ND	1.4
BA-6125-3	1.5-2.0'	5.0	72	ND	ND	18	ND	ND	ND
BA-6125-4	2.5-3.0'	ND	28	ND	11	18	ND	ND	ND
BA-6125-5	3.5-4.0'	2.4	39	2.8	24	170	ND	ND	2.5
BA-6125-6	4.5-5.0'	ND	45	ND	14	27	ND	ND	ND
BA-6125-7	5.5-6.0'	ND	2250	ND	666	ND	ND	ND	ND
BA-6125-8	6.5-7.0'								
BA-6125-9	7.5-8.0'	2.1	304	4.9	15	ND	ND	ND	ND
BA-6125-10	8.5-9.0'	ND	60	ND	11	ND	ND	ND	ND
BA-2231-1	0.0-0.5'	2.6	69	ND	14	ND	ND	ND	0.43
BA-2231-2	0.5-1.0'	2.9	51	ND	11	ND	ND	ND	ND
BA-2231-3	1.5-2.0'	2.4	215	12.7	64	263	ND	ND	5.7
BA-2231-4	2.5-3.0'	ND	47	3.0	8	22	ND	ND	0.86
BA-2231-5	3.5-4.0'	4.0	259	ND	44	57	ND	ND	0.88
BA-2231-6	4.5-5.0'	ND	51	ND	11	ND	ND	ND	ND
BA-2231-7	5.5-6.0'	ND	41	ND	13	ND	ND	ND	ND
BA-2231-8	6.5-7.0'	ND	126	ND	16	ND	ND	ND	ND
BA-2231-9	7.5-8.0'	ND	48	ND	11	ND	ND	ND	0.40
BA-2231-10	8.5-9.0'	ND	34	ND	14	ND	ND	ND	ND

ANALYSIS RESULTS FROM
SOIL SAMPLING AT
RCRA UNITS

TABLE 6

File = BAD1

BURN AREA - METAL CONCENTRATIONS

All Values Are mg/kg (ppm)

SAMPLE I.D.	SAMPLE Depth	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
BA-4132-1	0.0-0.5'								
BA-4132-2	0.5-1.0'	ND	50	9.5	19	66	ND	ND	ND
BA-4132-3	1.5-2.0'	ND	75	ND	10	ND	ND	ND	ND
BA-4132-4	2.5-3.0'	2.0	43	ND	8	ND	ND	ND	0.43
BA-4132-5	3.5-4.0'	ND	45	ND	5	ND	ND	ND	ND
BA-4132-6	4.5-5.0'	2.0	221	ND	8	ND	ND	ND	ND
BA-4132-7	5.5-6.0'	2.1	306	ND	10	ND	ND	ND	ND
BA-4132-8	6.5-7.0'	ND	256	ND	7	8.7	ND	ND	0.43
BA-4132-9	7.5-8.0'	ND	31	ND	ND	ND	ND	ND	ND
BA-4132-10	8.5-9.0'	ND	32	ND	ND	ND	ND	ND	ND
BA-5828-1	0.0-0.5'	ND	56	ND	15	ND	ND	ND	ND
BA-5828-2	0.5-1.0'	ND	55	ND	13	ND	ND	ND	0.42
BA-5828-3	1.5-2.0'	ND	49	ND	10	13	ND	ND	ND
BA-5828-4	2.5-3.0'	ND	52	ND	10	13	ND	ND	0.86
BA-5828-5	3.5-4.0'	ND	41	ND	9	ND	ND	ND	ND
BA-5828-6	4.5-5.0'	ND	680	ND	155	7.6	ND	ND	ND
BA-5828-7	5.5-6.0'	ND	410	ND	15	ND	ND	ND	ND
BA-5828-8	6.5-7.0'	ND	38	ND	9	ND	ND	ND	ND
BA-5828-9	7.5-8.0'	ND	39	ND	8	ND	ND	ND	ND
BA-5828-10	8.5-9.0'	ND	42	ND	10	ND	ND	ND	ND
BA-10615-1	0.0-0.5'	ND	55	ND	11	12	ND	ND	ND
BA-10615-2	0.5-1.0'	ND	65	ND	8	22	ND	ND	1.2
BA-10615-3	1.5-2.0'	ND	123	ND	24	75	ND	ND	2.3
BA-10615-4	2.5-3.0'	ND	77	ND	15	33	ND	ND	0.40
BA-10615-5	3.5-4.0'	ND	69	ND	13	17	ND	ND	ND
BA-10615-6	4.5-5.0'								
BA-10615-7	5.5-6.0'	2.6	37	ND	12	41	ND	ND	ND
BA-10615-8	6.5-7.0'								
BA-10615-9	7.5-8.0'	ND	78	ND	17	23	ND	ND	ND
BA-10615-10	8.5-9.0'	ND	57	ND	11	ND	ND	ND	ND
Detection Limit		2.0	5	*0.50	5	5.0	0.20	1.0	*3.0
Average Concentration		2.9	131	1.0	29	22	0.20	1.0	2.5
Upper Confidence Limit		2.9	189	1.4	46	31	0.20	1.0	2.8
Lower Confidence Limit		2.8	72	0.6	12	14	0.20	1.0	2.2

ANALYSIS RESULTS FROM
SOIL SAMPLING AT
RCRA UNITS

TABLE 6

File = BAD1

BURN AREA - METAL CONCENTRATIONS

All Values Are mg/kg (ppm)

SAMPLE I.D.	SAMPLE Depth	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
Sample Standard Deviation		0.4	285	2.0	82	40	--	--	1.3
Sample Variance		0.2	81334	3.9	6769	1597	--	--	1.6
Coefficient of Variation		15.5	218	192	286	178	--	--	50
Maximum Value		5.0	2250	12.7	666	263	ND	ND	7.4
Total Number of Samples		66	66	66	66	66	66	66	66
Background Average		4.6	52	0.50	50	3.7	0.10	0.50	3.0
Background Variance		1.0	35	0.00	0	3.4	0.00	0.00	0.0
t*		-7.9	2.2	2.2	-2.1	3.8			-3.3
t'		1.7	1.7	1.7	1.7	1.7			1.7

NOTE:

All No Detection (ND) Values have been given
a value equal to the detection limit
for purposes of calculation

Std Dev. and Var are based on $n - 1$

$t^* = (\text{sample avg.} - \text{background avg.}) / \sqrt{(\text{sample var.} / \# \text{ samples}) + \text{background var.} / \# \text{ samples}}$

If $t^* > t'$ then sample avg. \neq background avg.

* The detection limit from the background samples

ANALYSIS RESULTS FROM
SOIL SAMPLING AT
RCRA UNITS

TABLE 7

File = BCPR02

BURN CAGE, PANS AND RAILS AREA - METAL CONCENTRATIONS

All Values Are mg/kg (ppm)

SAMPLE I.D.	SAMPLE Depth	Arsenic	Barium	Cadmium	Chromium	Copper	Lead	Mercury	Selenium	Silver
BCPR-11038-1	0.0-0.5'	3.0	75	ND	ND	ND	8.0	ND	ND	ND
BCPR-11038-1	0.5-1.0'	3.0	70	ND	ND	10	8.0	ND	ND	ND
BCPR-11038-1	1.0-2.0'	ND	50	ND	ND	10	4.0	ND	ND	ND
BCPR-11038-1	2.0-3.0'	8.0	620	1.4	ND	28	82	ND	ND	ND
BCPR-11543-1	0.0-0.5'	4.0	65	0.50	ND	12	12	ND	ND	ND
BCPR-11543-2	0.5-1.0'	3.0	55	ND	ND	ND	4.0	ND	ND	ND
BCPR-11543-3	1.0-2.0'	5.0	60	0.60	ND	40	30	ND	ND	ND
BCPR-11543-4	2.0-3.0'	5.0	55	ND	ND	ND	4.0	ND	ND	ND
BCPR-10617-1	0.0-0.5'	4.0	55	ND	ND	10	8.0	ND	ND	ND
BCPR-10617-2	0.5-1.0'	ND	50	ND	ND	ND	8.0	ND	ND	ND
BCPR-10617-3	1.0-2.0'	3.0	ND	ND	ND	ND	4.0	ND	ND	ND
BCPR-10617-4	2.0-3.0'	4.0	ND	ND	ND	10	4.0	ND	ND	ND
BCPR-8113-1	0.0-0.5'	4.0	ND	ND	ND	10	8.0	ND	ND	ND
BCPR-8113-2	0.5-1.0'	4.0	75	ND	ND	ND	6.0	ND	ND	ND
BCPR-8113-3	1.0-2.0'	4.0	60	4.6	ND	20	14	ND	ND	ND
BCPR-8113-4	2.0-3.0'	6.0	ND	ND	ND	ND	4.0	ND	ND	ND
BCPR-6036-1	0.0-0.5'	5.0	80	1.0	ND	32	24	ND	ND	ND
BCPR-6036-2	0.5-1.0'	5.0	60	ND	ND	10	6.0	ND	ND	ND
BCPR-6036-3	1.0-2.0'	4.0	65	1.0	ND	22	18	ND	ND	ND
BCPR-6036-4	2.0-3.0'	5.0	70	ND	ND	ND	6.0	ND	ND	ND
BCPR-5729-1	0.0-0.5'	7.0	90	0.50	ND	14	10	ND	ND	ND
BCPR-5729-2	0.5-1.0'	4.0	65	ND	ND	12	8.0	ND	ND	ND
BCPR-5729-3	1.0-2.0'	4.0	70	0.80	ND	24	26	ND	ND	ND
BCPR-5729-4	2.0-3.0'	5.0	500	1.0	ND	42	110	ND	ND	ND
BCPR-3219-1	0.0-0.5'	6.0	70	0.70	ND	38	42	ND	ND	ND
BCPR-3219-2	0.5-1.0'	6.0	65	1.0	ND	42	26	ND	ND	ND
BCPR-3219-3	1.0-2.0'	6.0	80	1.2	ND	76	54	ND	ND	ND
BCPR-3219-4	2.0-3.0'	7.0	100	1.2	ND	82	62	ND	ND	ND
BCPR-2138-1	0.0-0.5'	5.0	65	0.50	ND	14	14	ND	ND	ND
BCPR-2138-2	0.5-1.0'	5.0	70	ND	ND	10	10	ND	ND	ND
BCPR-2138-3	1.0-2.0'	8.0	90	1.0	ND	68	40	ND	ND	ND
BCPR-2138-4	2.0-3.0'									

ANALYSIS RESULTS FROM
SOIL SAMPLING AT
RCRA UNITS

TABLE 7

File = BCPRD2

BURN CASE, PANS AND RAILS AREA - METAL CONCENTRATIONS

All Values Are mg/kg (ppm)

SAMPLE I.D.	SAMPLE Depth	Arsenic	Barium	Cadmium	Chromium	Copper	Lead	Mercury	Selenium	Silver
BCPR-2416-1	0.0-0.5'	6.0	55	ND	ND	12	10	ND	ND	ND
BCPR-2416-2	0.5-1.0'	6.0	50	ND	ND	ND	54	ND	ND	ND
BCPR-2416-3	1.0-2.0'	6.0	60	0.80	ND	68	28	ND	ND	ND
BCPR-2416-4	2.0-3.0'	7.0	50	ND	ND	10	6.0	ND	ND	ND
BCPR-3103-1	0.0-0.5'	5.0	ND	ND	ND	ND	4.0	ND	ND	ND
BCPR-3103-2	0.5-1.0'	6.0	ND	ND	ND	ND	4.0	ND	ND	ND
BCPR-3103-3	1.0-2.0'	9.0	75	ND	ND	12	4.0	ND	ND	ND
BCPR-3103-4	2.0-3.0'	7.0	60	ND	ND	10	8.0	ND	ND	ND
BCPR-1706-1	0.0-0.5'	4.0	95	ND	ND	19	7.0	ND	ND	ND
BCPR-1706-2	0.5-1.0'	ND	ND	ND	ND	ND	4.0	ND	ND	ND
BCPR-1706-3	1.0-2.0'	ND	ND	ND	ND	ND	4.0	ND	ND	ND
BCPR-1706-4	2.0-3.0'	ND	70	ND	ND	12	14	ND	ND	ND
BCPR-0925-1	0.0-0.5'	3.0	100	ND	ND	10	6	ND	ND	ND
BCPR-0925-2	0.5-1.0'	4.0	60	6.0	ND	18	16	ND	ND	ND
BCPR-0925-3	1.0-2.0'	4.0	60	ND	ND	14	10	ND	ND	ND
BCPR-0925-4	2.0-3.0'	4.0	85	ND	ND	10	22	ND	ND	ND
Detection Limit		3.0	50	0.50	50	10	4.0	0.10	0.50	3.0
Average Concentration		4.9	91	0.83	50	20	18	0.10	0.50	3.0
Upper Confidence Limit		5.2	116	1.1	50	25	24	0.10	0.50	3.0
Lower Confidence Limit		4.5	65	0.58	50	16	13	0.10	0.50	3.0
Sample Standard Deviation		1.5	106	0.99	--	19	22	--	--	--
Sample Variance		2.4	11130	0.99	--	355	491	--	--	--
Coefficient of Variation		32	117	120	--	92	120	--	--	--
Maximum Value		9.0	620	6.0	ND	82	110	ND	ND	ND
Total Number of Samples		47	47	47	47	47	47	47	47	47

ANALYSIS RESULTS FROM
SOIL SAMPLING AT
RCRA UNITS

TABLE 7

File = BCPRD2

BURN CAGE, PANS AND RAILS AREA - METAL CONCENTRATIONS

All Values Are mg/kg (ppm)

SAMPLE I.D.	SAMPLE Depth	Arsenic	Barium	Cadmium	Chromium	Copper	Lead	Mercury	Selenium	Silver
Background Average		4.6	52	0.50	50	11	3.7	0.10	0.50	3.0
Background Variance		1.0	35	0.00	0	7.5	3.4	0.00	0.00	0.0
t*		0.9	2.5	2.2		3.5	4.5			
t'		1.7	1.7	1.7		1.7	1.7			

NOTE:

All No Detection (ND) Values have been given
a value equal to the detection limit
for purposes of calculation

Std Dev. and Var are based on n - 1

$$t* = (\text{sample avg.} - \text{background avg.}) / \sqrt{(\text{sample var.} / \# \text{ samples}) + \text{background var.} / \# \text{ samples}}$$

.if $t* > t'$ then sample avg. \neq background avg.

ANALYSIS RESULTS FROM
SOIL SAMPLING AT
RCRA UNITS

TABLE 8

File = EFAD2

EAST FOFK DETONATION AREA - METAL CONCENTRATIONS

All Values Are mg/kg (ppm)

SAMPLE I.D.	SAMPLE Depth	Arsenic	Barium	Cadmium	Chromium	Copper	Lead	Mercury	Selenium	Silver
EFA-6633-1	0.0-0.5'	5.0	ND	0.80	ND	ND	6.0	ND	ND	ND
EFA-6633-2	0.5-1.0'	5.0	ND	4.0	ND	ND	20	ND	ND	ND
EFA-6633-3	1.0-2.0'	10	ND	ND	ND	ND	58	ND	ND	ND
EFA-6633-4	2.0-3.0'	5.0	ND	ND	ND	ND	6.0	ND	ND	ND
EFA-6633-5	3.0-4.0'	5.0	ND	ND	ND	ND	110	ND	ND	ND
EFA-6633-6	4.0-5.0'	8.0	ND	ND	ND	ND	6.0	ND	ND	ND
EFA-6633-7	5.0-6.0'	7.0	ND	ND	ND	ND	4.0	ND	ND	ND
EFA-6633-8	6.0-7.0'	7.0	ND	ND	ND	ND	6.0	ND	ND	ND
EFA-6633-9	7.0-8.0'	9.0	ND	ND	ND	ND	6.0	ND	ND	ND
EFA-1511-1	0.0-0.5'	5.0	ND	4.2	ND	ND	14	ND	ND	ND
EFA-1511-2	0.5-1.0'	4.0	ND	7.2	ND	ND	10	ND	ND	ND
EFA-1511-3	1.0-2.0'	5.0	ND	4.4	ND	ND	10	ND	ND	ND
EFA-1511-4	2.0-3.0'	5.0	ND	ND	ND	ND	6.0	ND	ND	ND
EFA-1511-5	3.0-4.0'	ND	ND	ND	ND	ND	4.0	ND	ND	ND
EFA-1511-6	4.0-5.0'	ND	ND	ND	ND	ND	4.0	ND	ND	ND
EFA-1511-7	5.0-6.0'	4.0	ND	ND	ND	ND	6.0	ND	ND	ND
EFA-1511-8	6.0-7.0'	6.0	ND	ND	ND	ND	8.0	ND	ND	ND
EFA-1511-9	7.0-8.0'	6.0	ND	ND	ND	12	6.0	ND	ND	ND
EFA-5714-1	0.0-0.5'									
EFA-5714-2	0.5-1.0'	7.0	ND	4.0	ND	ND	22	ND	ND	ND
EFA-5714-3	1.0-2.0'	5.0	ND	4.0	ND	ND	22	ND	ND	ND
EFA-5714-4	2.0-3.0'	ND	ND	2.0	ND	ND	8.0	ND	ND	ND
EFA-5714-5	3.0-4.0'	3.0	ND	0.50	ND	ND	6.0	ND	ND	ND
EFA-5714-6	4.0-5.0'	3.0	ND	0.50	ND	ND	6.0	ND	ND	ND
EFA-5714-7	5.0-6.0'	5.0	ND	0.50	ND	ND	6.0	ND	ND	ND
EFA-5714-8	6.0-7.0'	6.0	ND	ND	ND	ND	6.0	ND	ND	ND
EFA-5714-9	7.0-8.0'	8.0	50	ND	ND	ND	6.0	ND	ND	ND
EFA-3709-1	0.0-0.5'	4.0	ND	6.0	ND	ND	14	ND	ND	ND
EFA-3709-2	0.5-1.0'	3.0	ND	4.0	ND	ND	12	ND	ND	ND
EFA-3709-3	1.0-2.0'	4.0	ND	6.0	ND	ND	6.0	ND	ND	ND
EFA-3709-4	2.0-3.0'	8.0	60	ND	ND	ND	6.0	ND	ND	ND
EFA-3709-5	3.0-4.0'	6.0	ND	ND	ND		4.0	ND	ND	ND
EFA-3709-6	4.0-5.0'	6.0	ND	ND	ND	ND	6.0	ND	ND	ND
EFA-3709-7	5.0-6.0'	8.0	ND	ND	ND	ND	6.0	ND	ND	ND
EFA-3709-8	6.0-7.0'	ND	ND	ND	ND	ND	4.0	ND	ND	ND
EFA-3709-9	7.0-8.0'	10	78	ND	ND	ND	8.0	ND	ND	ND

ANALYSIS RESULTS FROM
SOIL SAMPLING AT
RCRA UNITS

TABLE 8

File = EFAD2

EAST FOFK DETONATION AREA - METAL CONCENTRATIONS

All Values Are mg/kg (ppm)

SAMPLE I.D.	SAMPLE Depth	Arsenic	Barium	Cadmium	Chromium	Copper	Lead	Mercury	Selenium	Silver
EFA-2220-1	0.0-0.5'	5.0	ND	8.0	ND	ND	20	ND	ND	ND
EFA-2220-2	0.5-1.0'	3.0	ND	6.0	ND	ND	16	ND	ND	ND
EFA-2220-3	1.0-2.0'	ND	ND	26	ND	ND	8.0	ND	ND	ND
EFA-2220-4	2.0-3.0'	3.0	ND	0.80	ND	ND	4.0	ND	ND	ND
EFA-2220-5	3.0-4.0'	4.0	ND	72	ND	ND	6.0	ND	ND	ND
EFA-2220-6	4.0-5.0'	4.0	ND	ND	ND	ND	6.0	ND	ND	ND
EFA-2220-7	5.0-6.0'	ND	ND	ND	ND	ND	26	ND	ND	ND
EFA-2220-8	6.0-7.0'	ND	ND	ND	ND	ND	4.0	ND	ND	ND
EFA-2220-9	7.0-8.0'	4.0	ND	ND	ND	ND	6.0	ND	ND	ND
EFA-0240-1	0.0-0.5'	4.0	ND	2.2	ND	ND	12	ND	ND	ND
EFA-6633-2	0.5-1.0'	4.0	ND	ND	ND	ND	6.0	ND	ND	ND
EFA-6633-3	1.0-2.0'	5.0	ND	ND	ND	ND	4.0	ND	ND	ND
EFA-6633-4	2.0-3.0'	ND	ND	ND	ND	ND	4.0	ND	ND	ND
EFA-6633-5	3.0-4.0'	3.0	ND	ND	ND	ND	4.0	ND	ND	ND
EFA-6633-6	4.0-5.0'	3.0	ND	ND	ND	10	ND	ND	ND	ND
EFA-6633-7	5.0-6.0'	ND	ND	ND	ND	ND	ND	ND	ND	ND
EFA-6633-8	6.0-7.0'	4.0	ND	ND	ND	16	ND	ND	ND	ND
EFA-6633-9	7.0-8.0'	5.0	ND	ND	ND	ND	4.0	ND	ND	ND
Detection Limit		3.0	50	0.50	50	10	4.0	0.10	0.50	3.0
Sample Average Concentration		4.9	51	3.4	50	10	11	0.10	0.50	3.0
Upper Confidence Limit		5.3	52	5.8	50	10	15	0.10	0.50	3.0
Lower Confidence Limit		4.5	50	0.99	50	10.0	7.1	0.10	0.50	3.0
Sample Standard Deviation		1.9	4.1	10	--	0.87	16	--	--	--
Sample Variance		3.7	16	108	--	0.76	269	--	--	--
Coefficient of Variation		39	8.0	306	--	8.6	151	--	--	--
Maximum Value		10	78	72	ND	16	110	ND	ND	ND
Total Number of Samples		53	53	53	53	52	53	53	53	53

ANALYSIS RESULTS FROM
SOIL SAMPLING AT
RCRA UNITS

TABLE B

File = EFAD2

EAST FOFK DETONATION AREA - METAL CONCENTRATIONS

		All Values Are mg/kg (ppm)								
SAMPLE I.D.	SAMPLE Depth	Arsenic	Barium	Cadmium	Chromium	Copper	Lead	Mercury	Selenium	Silver
Background Average		4.6	52	0.50	50	11	3.7	0.10	0.50	3.0
Background Variance		1.0	35	0.00	0	7.5	3.4	0.00	0.00	0.0
t*		1.0	-1.1	2.0		-1.0	3.2			
t'		1.7	1.7	1.7		1.7	1.7			

NOTE:

All No Detection (ND) Values have been given
a value equal to the detection limit
for purposes of calculation

Std Dev. and Var are based on n - 1

$$* = (\text{sample avg.} - \text{background avg.}) / \sqrt{((\text{sample var.} / \# \text{ samples}) + \text{background var.} / \# \text{ samples})}$$

If $t* > t$ then sample avg. \neq background avg.

TABLE 9

LEAD CONCENTRATIONS AT LEAD AZIDE AREA
0 - 1 FEET

<u>Sample I.D.</u>	<u>Concentration, ppm</u>
207-1, 0-0.5'	<4
207-2, 0.5-1.0'	<4
207-3, 0.0-0.5'	<4
207-4, 0.5-1.0'	<4
207-5, 0.0-0.5'	<4
207-6, 0.5-1.0'	<4
Detection Limit	4
Average Concentration	4
Upper Confidence Limit	4
Lower Confidence Limit	4
Standard Deviation	0
Variance	0
Coefficient of Variation	--
Background Average	3.7
Background Variance	3.4
t*	0.8
t' .05 (one tailed test)	2.0

ANALYSIS RESULTS FROM
SOIL SAMPLING AT
RCRA UNITS

TABLE 10

File = BADBFM

BURN AREA - INDICATOR PARAMETERS

		All Values Are mg/kg (ppm)		
SAMPLE I.D.	SAMPLE Depth	Boron	Flouride	Magnesium
BA-10737-1	0.0-0.5'			3810
BA-10737-2	0.5-1.0'	1.5	ND	3460
BA-10737-3	1.5-2.0'	3.5	ND	2920
BA-10737-4	2.5-3.0'	2.0	ND	3020
BA-10737-5	3.5-4.0'	0.82	ND	3040
BA-10737-6	4.5-5.0'	0.69	ND	3110
BA-10737-7	5.5-6.0'	1.2	ND	3890
BA-10737-8	6.5-7.0'	21	ND	2690
BA-10737-9	7.5-8.0'	30	4.6	10100
BA-10737-10	8.5-9.0'	2.1	ND	1820
BA-6833-1	0.0-0.5'	1.5	ND	3660
BA-6833-2	0.5-1.0'	0.82	ND	3660
BA-6833-3	1.5-2.0'	1.3	ND	3650
BA-6833-4	2.5-3.0'	0.50	ND	3240
BA-6833-5	3.5-4.0'	1.7	ND	3520
BA-6833-6	4.5-5.0'	1.4	ND	5050
BA-6833-7	5.5-6.0'	18	ND	4860
BA-6833-8	6.5-7.0'	9.4	ND	3170
BA-6833-9	7.5-8.0'	3.3	ND	2520
BA-6833-10	8.5-9.0'	3.4	ND	3060
BA-6125-1	0.0-0.5'	0.77	ND	3720
BA-6125-2	0.5-1.0'	0.60	ND	3780
BA-6125-3	1.5-2.0'	10	ND	2200
BA-6125-4	2.5-3.0'	0.86	ND	1800
BA-6125-5	3.5-4.0'	0.82	ND	3060
BA-6125-6	4.5-5.0'	59	ND	2050
BA-6125-7	5.5-6.0'	118	ND	2650
BA-6125-8	6.5-7.0'			
BA-6125-9	7.5-8.0'	25	ND	1680
BA-6125-10	8.5-9.0'	24	ND	3020
BA-2231-1	0.0-0.5'	0.41	ND	4330
BA-2231-2	0.5-1.0'	0.50	ND	3930
BA-2231-3	1.5-2.0'	3.0	ND	2410
BA-2231-4	2.5-3.0'	1.3	ND	2020
BA-2231-5	3.5-4.0'	2.6	ND	3250
BA-2231-6	4.5-5.0'	0.50	ND	2180
BA-2231-7	5.5-6.0'	ND	ND	3380
BA-2231-8	6.5-7.0'	ND	ND	3860
BA-2231-9	7.5-8.0'	0.28	ND	4640
BA-2231-10	8.5-9.0'	ND	ND	2660

17-Mar-88

WENCK ASSOCIATES, INC.

ANALYSIS RESULTS FROM
SOIL SAMPLING AT
RCRA UNITS

TABLE 10

File = BADBFM

BURN AREA - INDICATOR PARAMETERS

All Values Are mg/kg (ppm)

SAMPLE I.D.	SAMPLE Depth	Boron	Flouride	Magnesium
BA-4132-1	0.0-0.5'			
BA-4132-2	0.5-1.0'	0.68	ND	3110
BA-4132-3	1.5-2.0'	1.92	ND	4050
BA-4132-4	2.5-3.0'	0.82	ND	2960
BA-4132-5	3.5-4.0'	0.88	ND	2580
BA-4132-6	4.5-5.0'	ND	ND	5210
BA-4132-7	5.5-6.0'	0.82	ND	4990
BA-4132-8	6.5-7.0'	0.25	ND	4200
BA-4132-9	7.5-8.0'	ND	ND	2110
BA-4132-10	8.5-9.0'	0.16	ND	1430
BA-5828-1	0.0-0.5'	0.55	ND	3950
BA-5828-2	0.5-1.0'	0.88	ND	3150
BA-5828-3	1.5-2.0'	1.5	ND	3650
BA-5828-4	2.5-3.0'	ND	ND	3690
BA-5828-5	3.5-4.0'	1.5	ND	3970
BA-5828-6	4.5-5.0'	20	ND	2870
BA-5828-7	5.5-6.0'	6.1	ND	5770
BA-5828-8	6.5-7.0'	3.1	ND	3110
BA-5828-9	7.5-8.0'	3.1	ND	3880
BA-5828-10	8.5-9.0'	1.9	ND	4730
BA-10615-1	0.0-0.5'	4.2	ND	3790
BA-10615-2	0.5-1.0'	7.2	ND	2840
BA-10615-3	1.5-2.0'	5.7	ND	3690
BA-10615-4	2.5-3.0'	2.3	ND	3620
BA-10615-5	3.5-4.0'	1.7	ND	3100
BA-10615-6	4.5-5.0'			
BA-10615-7	5.5-6.0'	0.82	ND	3040
BA-10615-8	6.5-7.0'			
BA-10615-9	7.5-8.0'	1.0	ND	5720
BA-10615-10	8.5-9.0'	1.6	ND	3380
Detection Limit		0.10	2.0	0.16
Average Concentration		6.5	<2.0	3489
Upper Confidence Limit		10.0	--	3749
Lower Confidence Limit		3.0	--	3229

NOTE:

All No Detection (ND) Values have been given
a value equal to the detection value
for purposes of calculation

ANALYSIS RESULTS FROM
SOIL SAMPLING AT
RCRA UNITS

TABLE 11

File = BCPRBFM

BURN CAGE, PANS AND RAILS AREA - INDICATOR PARAMETERS

All Values Are mg/kg (ppm)				
SAMPLE I.D.	SAMPLE Depth	Boron	Flouride	Magnesium
BCPR-11038-1	0.0-0.5'	9.0	250	1670
BCPR-11038-1	0.5-1.0'	6.0	250	1870
BCPR-11038-1	1.0-2.0'	ND	250	1400
BCPR-11038-1	2.0-3.0'	9.0	250	3600
BCPR-11543-1	0.0-0.5'	15	200	1620
BCPR-11543-2	0.5-1.0'	12	250	1790
BCPR-11543-3	1.0-2.0'	5.0	300	1630
BCPR-11543-4	2.0-3.0'	7.0	250	2060
BCPR-10617-1	0.0-0.5'	7.0	250	1800
BCPR-10617-2	0.5-1.0'	ND	350	1440
BCPR-10617-3	1.0-2.0'	ND	250	1440
BCPR-10617-4	2.0-3.0'	ND	250	1300
BCPR-8113-1	0.0-0.5'	5.0	400	1600
BCPR-8113-2	0.5-1.0'	ND	200	200
BCPR-8113-3	1.0-2.0'	42	ND	1730
BCPR-8113-4	2.0-3.0'	6.0	400	1630
BCPR-6036-1	0.0-0.5'	9.0	350	1970
BCPR-6036-2	0.5-1.0'	7.0	350	1960
BCPR-6036-3	1.0-2.0'	5.0	350	1670
BCPR-6036-4	2.0-3.0'	7.0	250	1900
BCPR-5729-1	0.0-0.5'	10	550	2580
BCPR-5729-2	0.5-1.0'	ND	300	1900
BCPR-5729-3	1.0-2.0'	ND	250	1740
BCPR-5729-4	2.0-3.0'	7.0	200	2000
BCPR-3219-1	0.0-0.5'	15	250	2300
BCPR-3219-2	0.5-1.0'	14	300	2110
BCPR-3219-3	1.0-2.0'	8.0	350	2380
BCPR-3219-4	2.0-3.0'	8.0	300	2190
BCPR-2138-1	0.0-0.5'	8.0	250	1860
BCPR-2138-2	0.5-1.0'	6.0	350	1930
BCPR-2138-3	1.0-2.0'	10	300	2330
BCPR-2138-4	2.0-3.0'			
BCPR-2416-1	0.0-0.5'	13	300	2310
BCPR-2416-2	0.5-1.0'	14	350	2340
BCPR-2416-3	1.0-2.0'	8.0	400	1990
BCPR-2416-4	2.0-3.0'	8.0	250	2320

ANALYSIS RESULTS FROM
SOIL SAMPLING AT
RCRA UNITS

TABLE 11

File = BCPRBFM

BURN CAGE, PANS AND RAILS AREA - INDICATOR PARAMETERS

		All Values Are mg/kg (ppm)		
SAMPLE I.D.	SAMPLE Depth	Boron	Flouride	Magnesium
BCPR-3103-1	0.0-0.5'	6.0	350	2260
BCPR-3103-2	0.5-1.0'	7.0	100	2660
BCPR-3103-3	1.0-2.0'	9.0	ND	2410
BCPR-3103-4	2.0-3.0'	7.0	ND	2200
BCPR-1706-1	0.0-0.5'	57	300	2280
BCPR-1706-2	0.5-1.0'	18	300	1770
BCPR-1706-3	1.0-2.0'	4.0	350	1820
BCPR-1706-4	2.0-3.0'	3.0	250	1660
BCPR-0925-1	0.0-0.5'	30	400	2280
BCPR-0925-2	0.5-1.0'	11	350	1660
BCPR-0925-3	1.0-2.0'	6.0	250	1640
BCPR-0925-4	2.0-3.0'	4.0	250	1810
Detection Limit		5.0	100	500
Average Concentration		9.4	277	1936
Upper Confidence Limit		12	302	2054
Lower Confidence Limit		6.9	251	1819

NOTE:

All No Detection (ND) values have been given
a value equal to the detection value
for purposes of calculation

ANALYSIS RESULTS FROM
SOIL SAMPLING AT
RCRA UNITS

TABLE 12

File = EFABFM EAST FOFK DETONATION AREA - INDICATOR PARAMETERS

		All Values Are mg/kg (ppm)		
SAMPLE I.D.	SAMPLE Depth	Boron	Flouride	Magnesium
EFA-6633-1	0.0-0.5'	6.0	300	2110
EFA-6633-2	0.5-1.0'	6.0	200	2030
EFA-6633-3	1.0-2.0'	10	300	3100
EFA-6633-4	2.0-3.0'	7.0	250	2060
EFA-6633-5	3.0-4.0'	6.0	400	2090
EFA-6633-6	4.0-5.0'	8.0	300	2550
EFA-6633-7	5.0-6.0'	7.0	300	2520
EFA-6633-8	6.0-7.0'	7.0	300	2230
EFA-6633-9	7.0-8.0'	8.0	500	2840
EFA-1511-1	0.0-0.5'	5.0	250	2030
EFA-1511-2	0.5-1.0'	ND	150	1680
EFA-1511-3	1.0-2.0'	5.0	150	1900
EFA-1511-4	2.0-3.0'	ND	250	2040
EFA-1511-5	3.0-4.0'	ND	ND	1280
EFA-1511-6	4.0-5.0'	ND	ND	1290
EFA-1511-7	5.0-6.0'	ND	300	1520
EFA-1511-8	6.0-7.0'	6.0	300	1490
EFA-1511-9	7.0-8.0'	6.0	300	2720
EFA-5714-1	0.0-0.5'			
EFA-5714-2	0.5-1.0'	8.0	ND	2620
EFA-5714-3	1.0-2.0'	9.0	ND	1890
EFA-5714-4	2.0-3.0'	4.0	350	1060
EFA-5714-5	3.0-4.0'	4.0	250	1450
EFA-5714-6	4.0-5.0'	4.0	250	1580
EFA-5714-7	5.0-6.0'	5.0	350	1860
EFA-5714-8	6.0-7.0'	6.0	550	2330
EFA-5714-9	7.0-8.0'	6.0	300	2360
EFA-3709-1	0.0-0.5'	5.0	350	1750
EFA-3709-2	0.5-1.0'	ND	400	1390
EFA-3709-3	1.0-2.0'	5.0	300	1850
EFA-3709-4	2.0-3.0'	5.0	300	2850
EFA-3709-5	3.0-4.0'			
EFA-3709-6	4.0-5.0'	6.0	250	2200
EFA-3709-7	5.0-6.0'	8.0	300	2560
EFA-3709-8	6.0-7.0'	ND	250	1060
EFA-3709-9	7.0-8.0'	13	350	3980

ANALYSIS RESULTS FROM
SOIL SAMPLING AT
RCRA UNITS

TABLE 12

File = EFABFM

EAST FORK DETONATION AREA - INDICATOR PARAMETERS

		All Values Are $\mu\text{g/kg}$ (ppm)		
SAMPLE I.D.	SAMPLE Depth	Boron	Flouride	Magnesium
EFA-2220-1	0.0-0.5'	4.0	250	1720
EFA-2220-2	0.5-1.0'	4.0	ND	1510
EFA-2220-3	1.0-2.0'	4.0	250	1270
EFA-2220-4	2.0-3.0'	3.0	400	1530
EFA-2220-5	3.0-4.0'	5.0	500	1960
EFA-2220-6	4.0-5.0'	4.0	600	1550
EFA-2220-7	5.0-6.0'	3.0	600	1260
EFA-2220-8	6.0-7.0'	ND	350	540
EFA-2220-9	7.0-8.0'	4.0	550	1480
EFA-0240-1	0.0-0.5'	ND	250	2400
EFA-6633-2	0.5-1.0'	ND	200	1800
EFA-6633-3	1.0-2.0'	ND	200	1570
EFA-6633-4	2.0-3.0'	ND	350	1970
EFA-6633-5	3.0-4.0'	ND	350	1530
EFA-6633-6	4.0-5.0'	ND	400	1470
EFA-6633-7	5.0-6.0'	ND	ND	1180
EFA-6633-8	6.0-7.0'	ND	150	1500
EFA-6633-9	7.0-8.0'	6.0	200	2070
Detection Limit		5.0	100	500
Sample Average Concentration		5.6	294	1896
Upper Confidence Limit		6.0	324	2036
Lower Confidence Limit		5.2	265	1755

NOTE:

All No Detection (ND) values have been given
a value equal to the detection limit for purposes
of calculation

ANALYSIS RESULTS FROM
SOIL SAMPLING AT
ACRA UNITS

TABLE 13

ORGANIC COMPOUNDS IDENTIFIED AT 317 AREA
All Values Are ug/kg (ppb)

File = 317DRGADATA

SAMPLE I.D.	SAMPLE DEPTH	Acetone	Carbon Disulfide	Methyl Ethyl Ketone	4-Methyl-2 Pentanone	Methylene Chloride	Trans-1,2- Dichloroethene	Tetra- chloroethene	Tri- chloroethene	1,1,1-Tri chloroethane	Toluene	Total Xylenes
317-3369-1	0.0-0.5'	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND
317-3369-2	0.5-1.0'	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND
317-3369-3	1.0-2.0'	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND
317-3369-4	16.0-16.5'	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
317-3369-5	16.5-17.0'	160	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
317-3369-6	17.5-18.0'	150	ND	ND	ND	ND	ND	ND	6.6	ND	ND	ND
317-3752-1	0.0-0.5'	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND
317-3752-2	0.5-1.0'	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND
317-3752-3	1.0-2.0'	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND
317-3752-4	16.0-16.5'	ND	ND	ND	ND	ND	ND	10	54	ND	ND	ND
317-3752-5	16.5-17.0'	ND	ND	ND	ND	ND	ND	28	43	ND	ND	ND
317-3752-6	17.5-18.0'	ND	ND	ND	ND	ND	11	640	1500	16	ND	ND
317-0745-1	0.0-0.5'	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND
317-0745-2	0.5-1.0'	ND	ND	ND	NA	ND	NA	5.7	ND	ND	ND	ND
317-0745-3	1.0-2.0'	ND	ND	ND	NA	ND	NA	8.3	ND	ND	ND	ND
317-0745-4	16.0-16.5'	ND	ND	ND	ND	ND	ND	ND	23	ND	ND	ND
317-0745-5	16.5-17.0'	ND	ND	ND	ND	ND	ND	ND	29	ND	ND	ND
317-0745-6	17.5-18.0'	130	ND	ND	ND	ND	ND	ND	10	ND	ND	ND
317-6089-1	0.0-0.5'	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND
317-6089-2	0.5-1.0'	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND
317-6089-3	1.0-2.0'	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND
317-6089-4	16.0-16.5'	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
317-6089-5	16.5-17.0'	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
317-6089-6	17.5-18.0'	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
317-2092-1	0.0-0.5'	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND
317-2092-2	0.5-1.0'	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND
317-2092-3	1.0-2.0'	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND
317-2092-4	16.0-16.5'	ND	15	ND	ND	ND	ND	ND	5.0	ND	ND	5.0
317-2092-5	16.5-17.0'	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
317-2092-6	17.5-18.0'	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ANALYSIS RESULTS FROM
SOIL SAMPLING AT
RCRA UNITS

TABLE 13

ORGANIC COMPOUNDS IDENTIFIED AT 317 AREA

All Values Are ug/kg (ppb)

File = 317ORGADATA

SAMPLE I.D.	SAMPLE DEPTH	Acetone	Carbon Disulfide	Methyl Ethyl Ketone	4-Methyl-2 Pentanone	Methylene Chloride	Trans-1,2- Dichloroethene	Tetra- chloroethene	Tri- chloroethene	1,1,1-Tri chloroethane	Toluene	Total Xylenes
317-1397-1	0.0-0.5'	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND
317-1397-2	0.5-1.0'	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND
317-1397-3	1.0-2.0'	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND
317-1397-4	16.0-16.5'	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
317-1397-5	16.5-17.0'	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
317-1397-6	17.5-18.0'	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
317-6331-1	0.0-0.5'	ND	ND	ND	NA	ND	NA	12	13	ND	ND	ND
317-6331-2	0.5-1.0'	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND
317-6331-3	1.0-2.0'	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND
317-6331-4	16.0-16.5'	45	ND	14	ND	180	75	100	580	ND	8.0	ND
317-6331-5	16.5-17.0'	70	ND	6.5	70	8.8	39	290	1200	8.0	ND	ND
317-6331-6	17.5-18.0'	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
317-7573-1	0.5-1.0'	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND
317-7573-2	1.0-2.0'	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND
317-7573-3	16.0-16.5'	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND
317-7573-4	16.5-17.0'	150	ND	ND	ND	ND	ND	ND	7.0	ND	ND	ND
317-7573-5	17.5-18.0'	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
317-7573-6	17.5-18.0'	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.0	41
Detection Limit (1 thru 3)		10	5.0	10		5.0		5.0	5.0	5.0	5.0	5.0
(4 thru 6)		50	5.0	50	30	50	5.0	5.0	5.0	5.0	5.0	5.0

* ND * = Compound Not Detected

* NA * = Compound not analyzed

TABLE 14

WIPE SAMPLE RESULTS AT BUILDINGS 223 AND 236
METAL AND ORGANIC RESULTS

Background Metal Wipe Samples

	Lead mg/ft ²	Magnesium mg/ft ²	Boron mg/ft ²
	0.05	0.50	ND
Detection Limits	0.01	0.05	0.01

Metals Results

223-2 Building 223 (corner)	ND	.1	ND
236-2 Building 236 (floor)	0.05	0.8	ND
Detection Limits	0.01	0.05	0.01

Organic Results

<u>Sample ID</u>	<u>Location</u>	<u>Dibutyl Phthalate (mg/ft²)</u>	<u>Diphenylamine (mg/ft²)</u>
223-1	Building 223 (floor)	ND	ND
236-1	Building 236 (corner)	ND	ND
Detection Limits		10	0.1

ND - Not Detectable



Wenck Associates, Inc.

Consulting Engineers
(612) 475-0858

November 10, 1987

Mr. Alan Sorsher
California Department of Health Services
Toxic Substances Control Division
107 South Broadway, Room 7128
Los Angeles, California 90012


Dear Alan:

Enclosed herewith is the revised sampling and analysis plan in fulfillment of the approved RCRA Closure Plan for Bermite Division, Whittaker Corporation. We have made changes to our initial plan per our discussions of November 5, 1987. Please review this plan in preparation for our meeting on Thursday, November 12, 1987.

If you have any questions pertaining to this plan please do not hesitate to call.

Sincerely,

WENCK ASSOCIATES, INC.


Norman C. Wenck, P.E.
President

NCW/msw
Enclosure

cc: Michael Fernandez, U.S.E.P.A.
John Peloquin
Gordon Louttit, Whittaker
Glen Abdun Nur, Bermite

SAMPLING AND ANALYSIS PLAN
FOR RCRA UNITS

BERMITE DIVISION
WHITTAKER CORPORATION
EPA NO. CAD 064 573 108
22116 WEST SOLEDAD CANYON ROAD
SAUGUS, CA 91350

PREPARED BY

WENCK ASSOCIATES, INC.
832 TWELVE OAKS CENTER
15500 WAYZATA BOULEVARD
WAYZATA, MN 55391-1418
(612) 475-0858

October 1987

TABLE OF CONTENTS

- I. Introduction and Background
- II. Sample and Analysis Plans
 - A. 317 Former Surface Impoundment
 - B. 342 Former Surface Impoundment
 - C. Burn Cage, Pans and Rails Area
 - D. Burn Area
 - E. East Fork Detonation Area
 - F. Background Sampling Area

LIST OF FIGURES

- 1. General Site Map
- 2. 317 Former Surface Impoundment - Sample Locations
- 3. 342 Former Surface Impoundment - Sample Locations
- 4. Burn Cage, Pans and Rails Area - Sample Locations
- 5. Burn Area - Sample Locations
- 6. East Fork Detonation - Sample Locations
- 7. Background Sample Area - Sample Locations

LIST OF TABLES

- 1. Previous RCRA Soil Sample Designations
- 2. 317 Former Surface Impoundment - Random Sample Location Coordinates
- 3. 342 Former Surface Impoundment - Random Sample Location Coordinates
- 4. Burn Cage, Pans and Rails Area - Random Sample Location Coordinates
- 5. Burn Area - Random Sample Location Coordinates
- 6. East Fork Detonation - Random Sample Location Coordinates
- 7. Background Sample Area - Random Sample Location Coordinates

APPENDIX

- A. List of 40 CFR 261 Appendix VIII Hazardous Constituents to be tested for.
- B. Metals and Inorganics to be tested for.

I. INTRODUCTION AND BACKGROUND

As a requirement of the approved RCRA Closure Plan for the Bermite Division of Whittaker Corporation, a plan for the collection and analysis of soil samples at the RCRA Units must be submitted to and approved by both the Federal EPA Region IX and the California Department of Health Services. The following work plan for sample location, collection and analysis is in fulfillment of the above requirement.

The information given below details how the sample locations have been determined, how the samples will be collected and what the samples will be analyzed for and the method of analysis. This information is given for the following RCRA units at Bermite: 317 Former Surface Impoundment, 342 Former Surface Impoundment, Burn Cage, Pans and Rails Area, Burn Area and the East Fork Detonation Area. In addition, the Background Area used for determining background concentrations of metals is also included.

Reference is made to the Approved RCRA Closure Plan which is on file with the EPA and the California Department of Health Services.

Field conditions encountered during the implementation of this plan may indicate modifications to the sampling locations and/or techniques and frequency but Whittaker shall endeavor to closely follow the general principles of this plan.

This plan is presented as follows: For each RCRA unit of concern, a description of the determination of sample location is given, and the number of samples to be taken and at what intervals (if applicable) is then

discussed. The analysis that are to be made on each sample or sample group is then indicated. The specific analysis type and the protocol under which the samples are to be taken and analyzed is then discussed. Following the text are the figures on which is indicated the sampling grid and sample locations for each RCRA unit.

Appendix A gives the list of Hazardous Constituents which are required to be tested for under the Resource Conservation and Recovery Act, (RCRA). Appendix B list the metals and other inorganic materials that will be tested for at all of the RCRA units. The elements and compounds indicated in these appendices and in the sampling and analysis plan for each RCRA unit are being analyzed for because they are the elements and compounds used in the production and research and development at the Bermite facility. No effort has been made to separate the elements and compounds on a RCRA unit by unit basis as there is no rational for doing so.

All sample boring locations at each of the RCRA units will be surveyed and tied into the real world coordinate system. The coordinates, elevations and sample point identification for each sample point will be determined and made part of the documentation of this work plan.

A. SAMPLING PLAN FOR THE 317 FORMER SURFACE IMPOUNDMENT

As can be seen on the enclosed Figure 2, a two dimensional grid has been laid out over the former surface impoundment. This grid extends 25 feet beyond the limits of the former surface impoundment area.

A random number generator on a Hewlett-Packard 15C hand-held calculator was used to generate random numbers for the purpose of selecting six random sampling locations. The random number generator was used to first generate an X value and then a Y value for each sampling point. Only hole numbers were used. If a point created was within six feet of another point, this sampling location was disregarded and an additional sampling point was generated. An additional sampling point was also chosen which is at the location of the former loading/unloading area of the former surface impoundment. An eighth sample point has been chosen at the location of the boring which had a high vapor reading during the boring program of July 1987. These sampling points are located on Figure 2.

The samples shall be taken with a California modified split-spoon sampler, machine driven to the required depths. Samples will be taken from 0-6", 6-12" and 12-24" from the present surface and from the surface of the 1983 excavation to 6", 6-12" and 12-24" from the surface of the 1983 excavation.

The samples will be analyzed for the metals as given in Appendix B. However, the 12-24" sample from the boring adjacent to BH-2 will be analyzed for the metals indicated above and for the Appendix VIII Hazardous Constituents given in Appendix A of this plan. Subsequent to the analysis of this first sample, the remaining samples will be analyzed for the metals indicated above and for any Appendix VIII Hazardous constituents found in the analysis of the first sample.

In addition to the sampling described above, sampling will be undertaken in conjunction with the trenching plan as detailed in the Approved RCRA Closure Plan. The sampling that will be performed, the analysis and the proper procedures are given in detail in the approved trenching plan contained in the approved RCRA Closure Plan. Also, sampling of groundwater from

groundwater monitoring wells to be installed at the 317 area will be undertaken. This monitoring plan is on file with the DHS and EPA.

All samples will be prepared and analyzed by the appropriate method as prescribed by EPA SW-846. Proper sample collection procedures, preparation and analysis as outlined in EPA SW-846 will be adhered to at all times. Quality control and safety procedures as outlined in EPA SW-846 and as detailed in the Approved RCRA Closure Plan will be followed at all times.

B. SAMPLING PLAN FOR THE 342 FORMER SURFACE IMPOUNDMENT

As can be seen on the enclosed Figure 3 a two dimensional grid has been laid out over the former surface impoundment. This grid extends five feet beyond the limits of the former surface impoundment area.

A random number generator on a Hewlett-Packard 15C hand-held calculator was used to generate random numbers for the purpose of selecting three random sampling locations. The random number generator was used to first generate an X value and then a Y value for each sampling point. Only hole numbers were used. If a point generated was within 12 feet of another point, this sample location was disregarded and an additional sampling point was generated. In addition, two further sampling points were chosen on a judgmental basis. An additional sampling point was also chosen which is at the location of the former loading/unloading area of the former surface impoundment. These sampling points are located on Figure 3.

The samples shall be taken with a California modified split-spoon sampler, machine driven to the required depths. Samples will be taken from 0-12" and 12-24" from the present surface and from the surface of the 1983 excavation to 12" and from 12-24" from the surface of the 1983 excavation.

The samples will be analyzed for the metals as given in Appendix B. The sample from the 12-24" soil horizon at BH-6, below the 1983 surface, will be chosen from those taken and will be analyzed for the metals indicated above and for the Appendix VIII Hazardous Constituents given in Appendix A of this plan. Subsequent to the analysis of this first sample, the remaining samples will be analyzed for the metals indicated above ^{and} for any Appendix VIII Hazardous constituents found in the analysis of the first sample.

The samples will be prepared and analyzed by the appropriate method as prescribed by EPA SW-846. Proper sample collection procedures, preparation and analysis as outlined in EPA SW-846 will be adhered to at all times. Quality control and safety procedures as outlined in EPA SW-846 and as detailed in the Approved RCRA Closure Plan will be followed at all times.

C. SAMPLING PLAN FOR THE BURN CAGE, PANS AND RAILS AREA

A two dimensional grid, extending at least five feet beyond the limits of the area, has been laid out to create the study area. Eight sampling points were generated on the grid in a random manner. A random number generator on a Hewlett-Packard 15C hand-held calculator was used to determine the sampling points. The X coordinate was generated first and then the Y coordinate was generated to create a sampling point on the grid. Only hole numbers were used. If a sampling point was located within four feet of another sampling point or on a ridge or slope upgradient of the area, this point was disregarded and a new sampling point was generated. In addition, a sampling point was chosen at the loading/unloading area of the waste management unit. Also, three additional sampling points were chosen at the location of the "hot spots" found during the previous sampling program (BP-3, BP-4, BP-16). These 12 sampling locations can be seen on Figure 4.

The samples will be taken with a California modified split-spoon sampler, machine driven to the required depths. The samples will be taken from each sampling point from 0-6", 6-12", 12-24" and 24-36". These samples will be collected, preserved and analyzed in accordance with the procedures outlined in EPA SW-846.

All samples will be analyzed for the metals given in Appendix B. In addition, the samples will be analyzed for the following organic materials: diphenylamine, butyl carbitol, dibutyl phthalate, diphenyl guanidine, and quinone.

These organic materials will be analyzed for because they are the main constituents of the materials used at this RCRA unit. A sample from the 6-12" soil horizon at the location of the former sample boring BP-16 will be analyzed for the Appendix VIII constituents given in Appendix A of this plan. This sample will be analyzed first and if any of these constituents are found, the remaining samples will also be analyzed for those constituents found.

D. SAMPLING PLAN FOR THE BURN AREA

A two dimensional grid extending 10 feet beyond the limits of the burn pit area has been laid out over the burn area. Six random sampling locations were generated on the grid using a random number generator on a Hewlett-Packard 15C hand-held calculator. The sampling points were generated by first generating an X value and then generating a Y value to create the sampling point. If a sampling point was chosen outside of the study area, or within six feet of another sampling point, this point was disregarded and another sampling point was generated. An additional sampling point has been chosen at the location of the former boring BH-C. These six sampling points can be seen on Figure 5.

Soil samples will be collected at each sampling point from the following soil horizons: 0-6", 6-12", 12-24", 36-48", 48-60", 60-72", 72-84", 84-96" and 96-108". These samples will all be obtained with the use of a California modified split-spoon sampler, machine driven to the required depths. The samples will be preserved and analyzed in accordance with EPA SW-846.

One sample from BH-C, the 12-24" soil horizon, will be analyzed for the Appendix VIII constituents given in Appendix A. This sample will also be analyzed for the metals given in Appendix B. In addition the following organics will be analyzed for: diphenylamine, butyl carbitol, dibutyl phthalate, diphenyl guanidine, quinone. These organic materials will be analyzed for because they are the main constituents of the materials used at this RCRA unit. Subsequent to the results of this first analysis, the rest of the samples taken will be analyzed for the metals and organics listed above and in addition will be analyzed for any of the Appendix VIII constituents found in the first sample analyzed.

E. SAMPLING PLAN FOR THE EAST FORK DETONATION RANGE

A two dimensional grid extending 10 feet beyond the limits of the detonation area has been laid out as the study area. Six random sampling points have been generated on the grid with the use of a random number generator on a Hewlett-Packard 15C hand-held calculator. These sampling points were generated by first generating an X coordinate and then generating a Y coordinate to create the sampling points. If a sampling point chosen was outside the study area or within six feet of another sampling point this point was disregarded and a new sampling point was generated. The six sampling points can be seen on Figure 6.

Soil samples will be collected at each sampling point from the following soil horizons: 0-6", 6-12", 12-24", 24-36", 36-48", 48-60", 60-72", 72-84" and 84-96". The samples will be taken with a California modified split-spoon sampler, machine driven to the required depths. All samples will be preserved and analyzed in accordance with EPA SW-846.

One sample from one of the random sampling locations will be analyzed for the Appendix VIII constituents given in Appendix A. This sample will be taken from the 36-48" soil horizon. This sample will also be analyzed for the metals given in Appendix B. In addition, the following organics will be analyzed for: diphenylamine, butyl carbitol, dibutyl phthalate, diphenyl guanidine, quinone. These organic materials will be analyzed for because they are the main constituents of the materials used at this RCRA unit. Subsequent to the results of this first analysis, the rest of the samples taken will be analyzed for the metals and organics listed above and in addition will be analyzed for any of the Appendix VIII constituents found in the first sample analyzed.

F. SAMPLING AND ANALYSIS OF SOILS FOR BACKGROUND CONCENTRATION OF METALS AT THE BERMITE FACILITY.

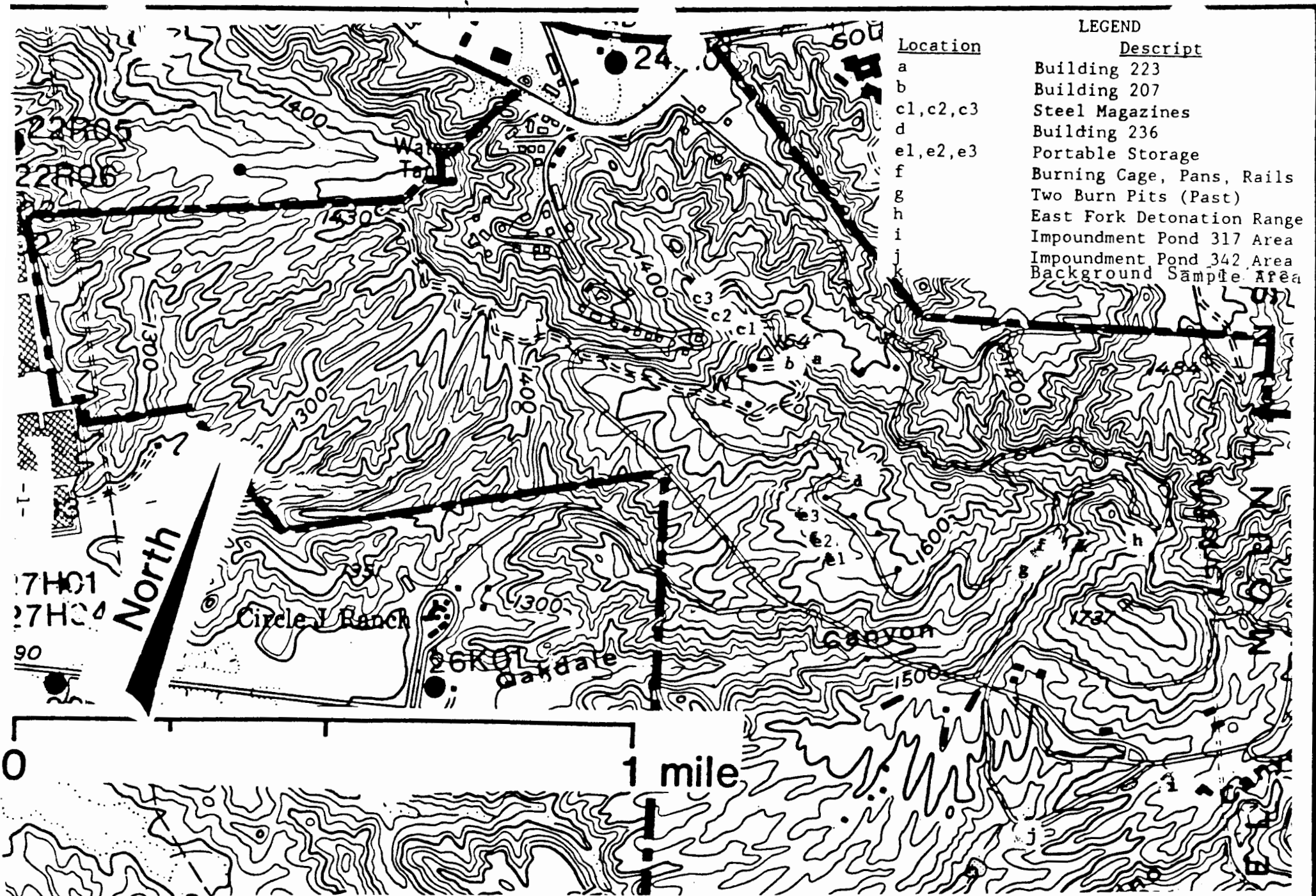
An uncontaminated area 30 ft by 30 ft in size and geologically similar to the waste management areas has been selected and can be seen on Figures 1 and 7. A two dimensional grid has been laid over the area. Four random sampling points have been generated on the grid with the use of a random number generator on a Hewlett Packard 15C hand-held calculator. These sampling points were generated by first generating an X coordinate and then generating a Y coordinate to create the sampling points. If a sampling point fell within 4 feet of another of the sampling points, this point was disregarded and a new sampling point was generated. These points can be seen on Figure 7.

At each sampling point, continuous sampling shall be performed and samples will be taken from the following soil horizons: 0-6", 6"-12", 12"-24", 24"-36", 36"-48", and 48"-60". The samples shall be taken with a California modified split-spoon sampler, machine driven to the required depths.

The samples will be analyzed for the metals given in Appendix B. The samples will be analyzed as described in the approved RCRA Closure Plan and the sample collection, preparation and analysis will all be done within the guidelines as set forth in EPA SW-846.

These inorganic elements will be analyzed for the purpose of determining what the background concentrations are of these elements. This background information will be used for comparison with the information obtained from the sample analysis at the RCRA units.

FIGURES



BERMITE DIVISION - WHITTAKER CORPORATION

GENERAL SITE MAP



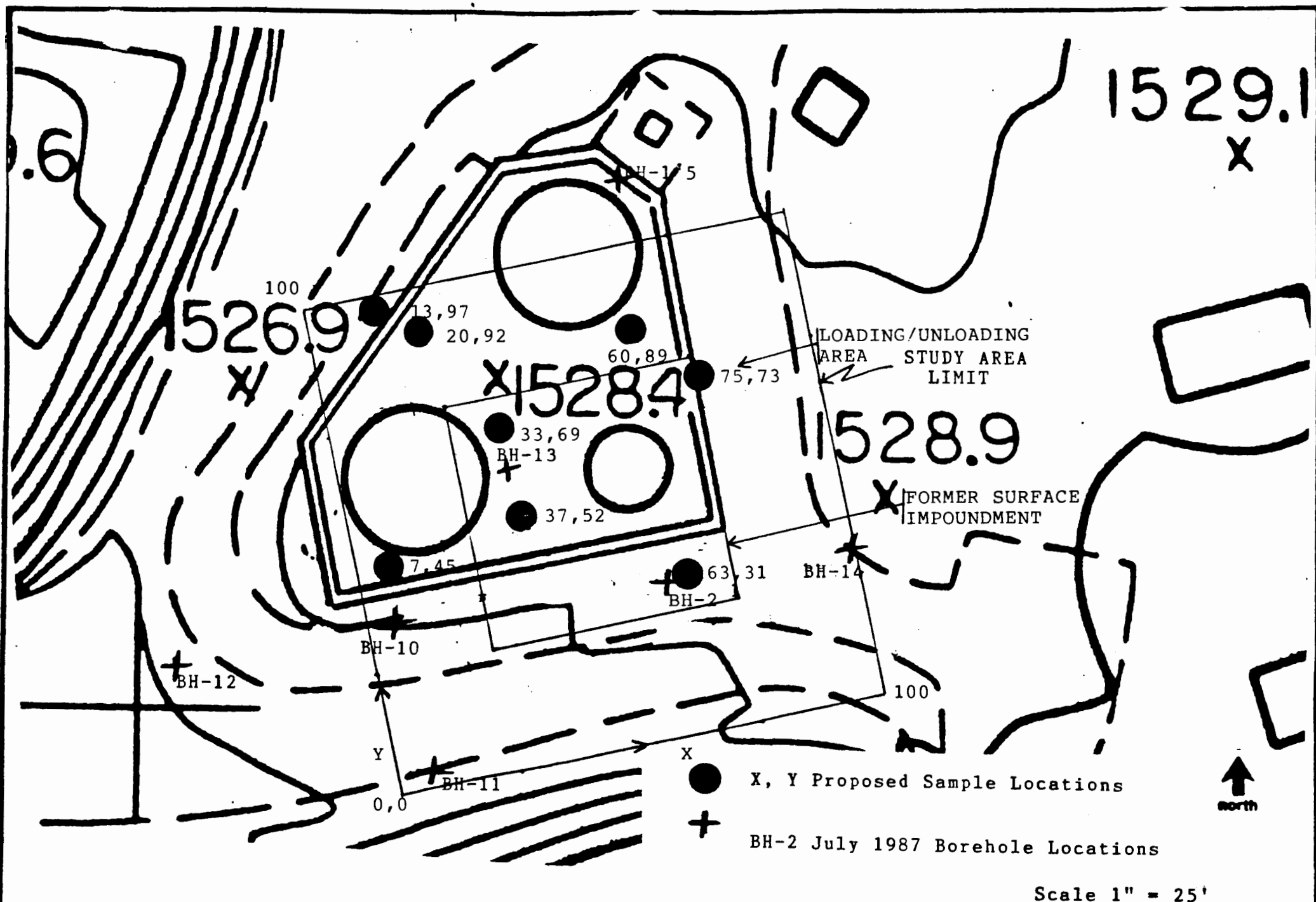
Wenck Associates, Inc.

Consulting Engineers

Twelve Oaks Center
15500 Wayzata Blvd.
Wayzata, MN 55391

Fig.

1



Scale 1" = 25'

BERMITE DIVISION - WHITTAKER CORPORATION

317 FORMER SURFACE IMPOUNDMENT - SAMPLE LOCATIONS



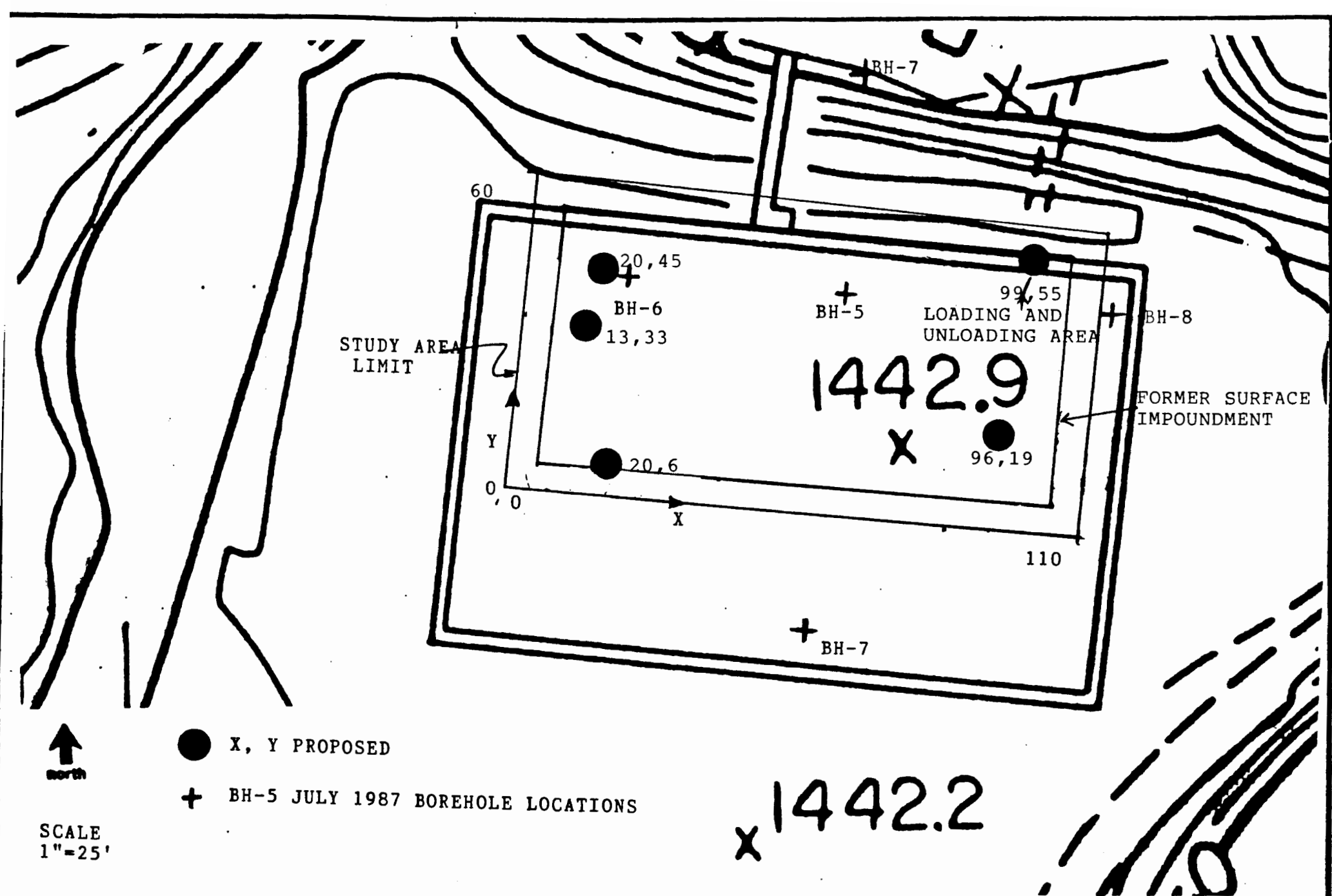
Wenck Associates, Inc.

Consulting Engineers

Twelve Oaks Center
15500 Wayzata Blvd.
Wayzata, MN 55391

Fig.

2



BERMITE DIVISION - WHITTAKER CORPORATION

342 FORMER SURFACE IMPOUNDMENT - SAMPLE LOCATION



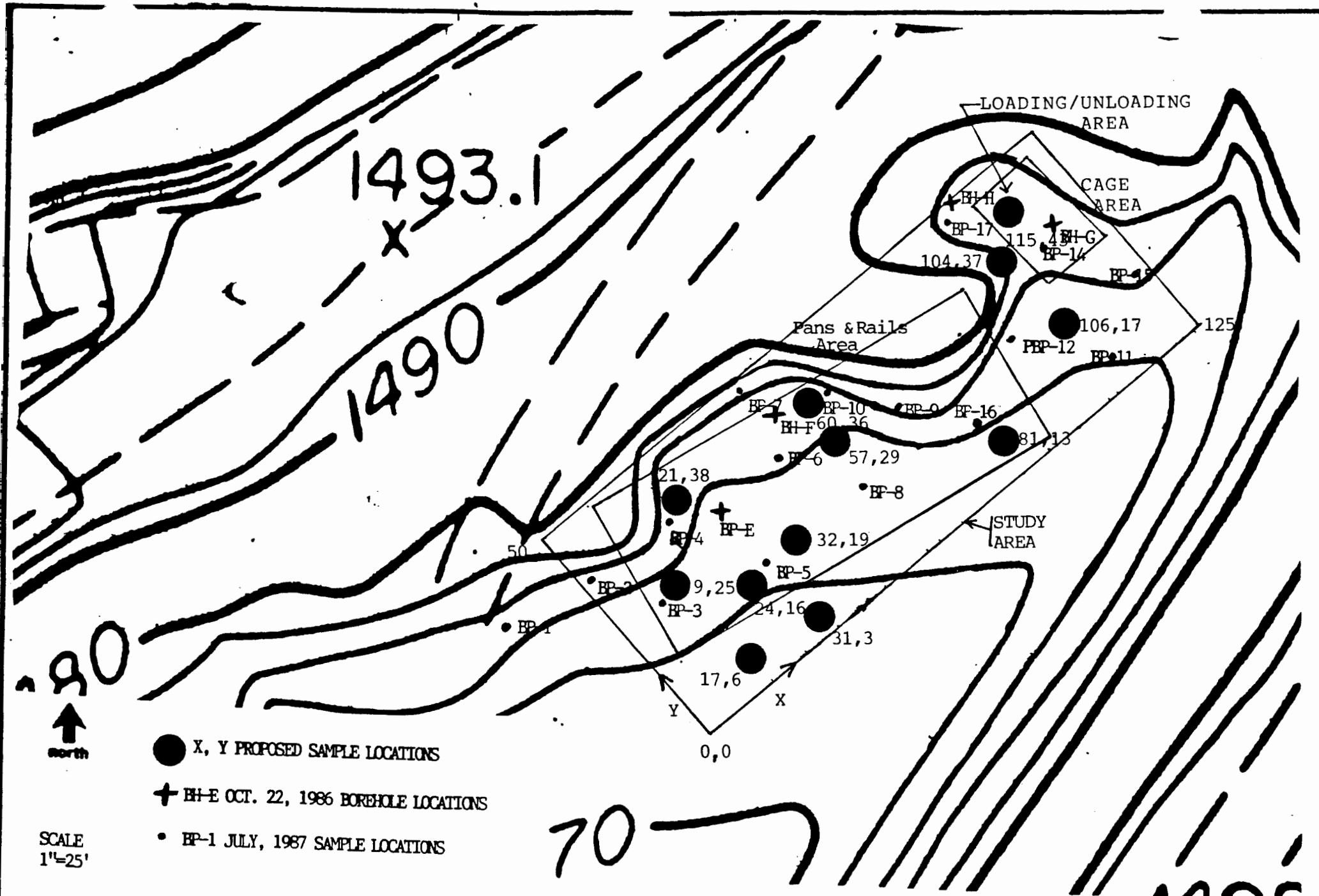
Wenck Associates, Inc.

Consulting Engineers

Twelve Oaks Center
15500 Wayzata Blvd.
Wayzata, MN 55391

Fig.

3



BERMITE DIVISION - WHITTAKER CORPORATION

BURN CAGE, PANS AND RAILS AREA - SAMPLE LOCATIONS



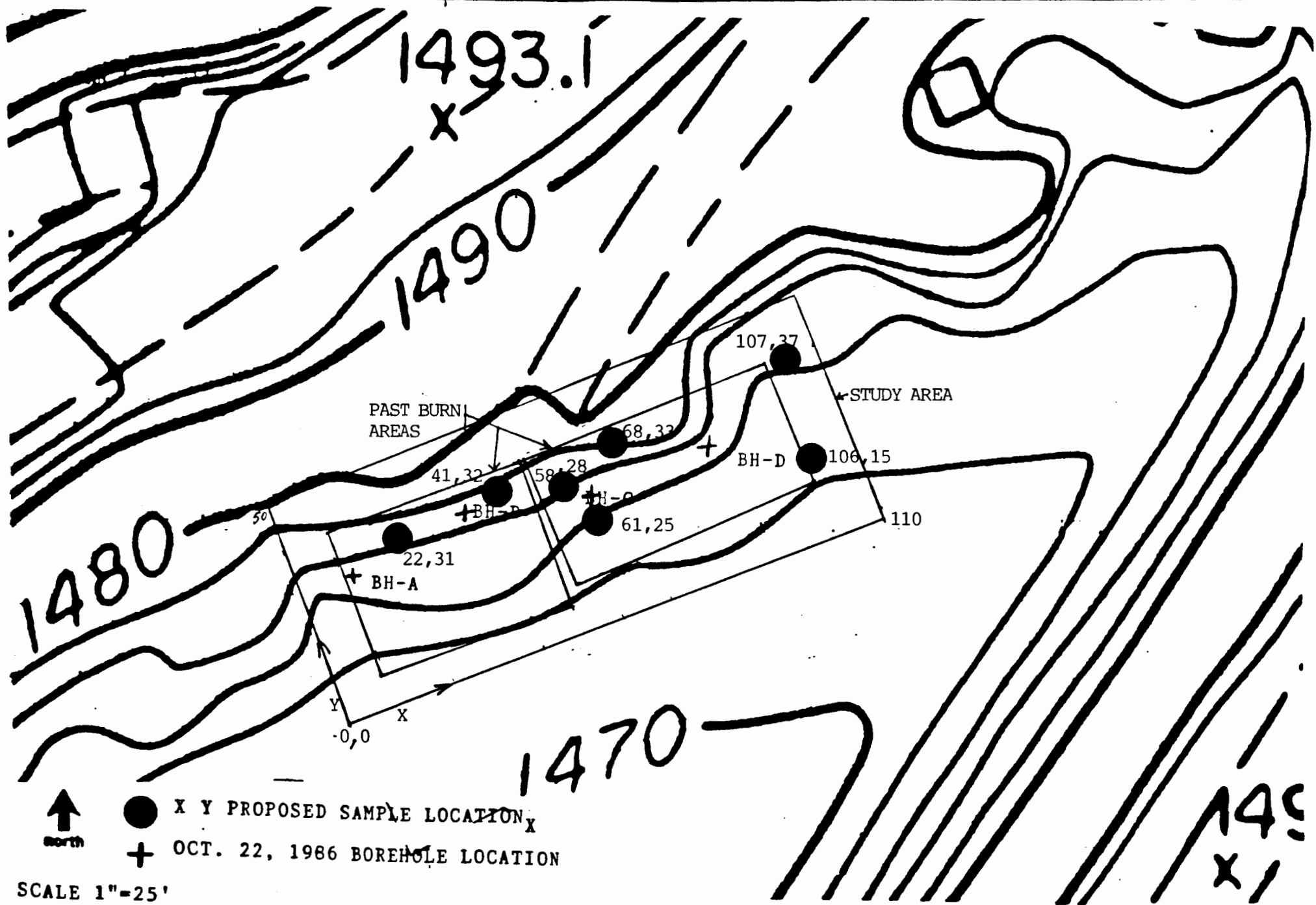
Wenck Associates, Inc.

Consulting Engineers

Twelve Oaks Center
15500 Wayzata Blvd.
Wayzata, MN 55391

Fig.

4



BERMITE DIVISION - WHITTAKER CORPORATION

BURN AREA - SAMPLE LOCATIONS



Wenck Associates, Inc.

Consulting Engineers

Twelve Oaks Center
15500 Wayzata Blvd
Wayzata, MN 55391

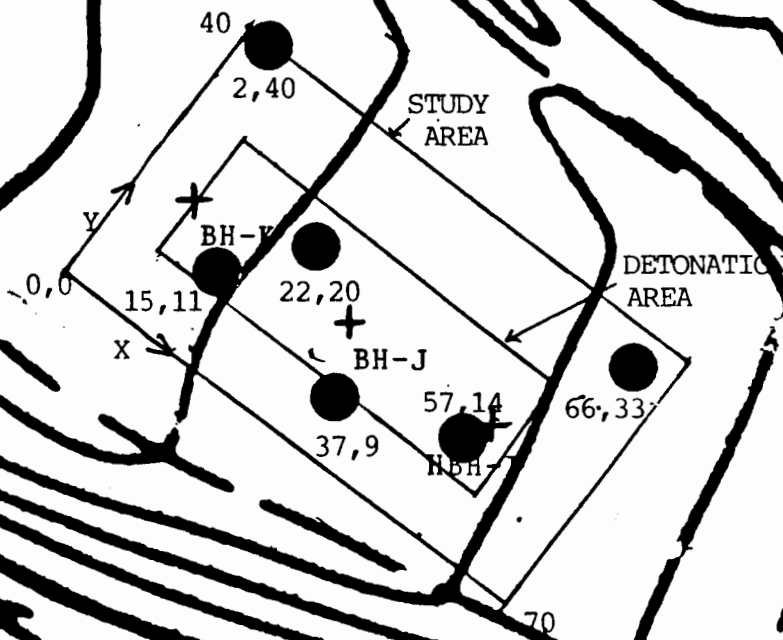
Fig.

5

15790

X

20



● X, Y PROPOSED SAMPLE LOCATION
 + OCT 22, 1986 BOREHOLE LOCATION



SCALE 1"=25'

BERMITE DIVISION - WHITTAKER CORPORATION

EAST FORK DETONATION - SAMPLE LOCATIONS

Consulting Engineers
 Twelve Oaks Center
 15500 Wayzata Blvd.
 Wayzata, MN 55391
 Wenck Associates, Inc.

Fig.

6

TABLES

TABLE 1
PREVIOUS RCRA SOIL SAMPLE DESIGNATIONS

<u>AREA</u>	<u>SAMPLE DESIGNATIONS</u>	<u>SAMPLE DATES</u>	<u>PARAMETERS</u>
317 Former Surface Impoundment	BH-2, BH-10 BH-11, BH-12, BH-13 BH-14, BH-15	July 1987	8 RCRA Metals and Organics
342 Former Surface Impoundment	BH-5, BH-6, BH-7 BH-8, BH-9	July 1987	8 RCRA Metals and Organics
Burn Cage, Pans and Rails Area	BH-E, BH-F, BH-G, BH-H (0-6", and 6"-12")	October 22, 1986	8 RCRA Metals and Reactivity
	BP-1, BP-2, BP-3, BP-4, BP-5, BP-6, BP-7, BP-8, BP-9, BP-10, BP-11, BP-12, BP-14, BP-15, BP-16, BP-17 (0-.5', .5'-1.0', 1.0'-1.5')	July 1987	8 RCRA Metals
Burn Area	BH-A, BH-B BH-C, BH-D (9.5'-10' and 19.5'-20')	October 22, 1986	8 RCRA Metals and Reactivity
East Fork Detonation	BH-I, BH-J, BH-K (0-0.5' and 9.5'-10')	October 22, 1986	Lead and Reactivity

TABLE 2

317 FORMER SURFACE IMPOUNDMENT
RANDOM AND JUDGMENTAL SAMPLE LOCATION COORDINATES

<u>Sample No.</u>	<u>X-Axis 0 - 100</u>	<u>Y-Axis 0 - 100</u>
1	33	69
2	37	52
3	7	45
4	60	89
5	20	92
6	13	97
7 (BH-2)	63	31
8 (Loading/)	75	73

TABLE 3

342 FORMER SURFACE IMPOUNDMENT
RANDOM AND JUDGMENTAL SAMPLE LOCATION COORDINATES

<u>Sample No.</u>	<u>X-Axis 0 - 110</u>	<u>Y-Axis 0 - 60</u>
1	96	19
2	13	33
3	20	6
4	20	45
5	99	55

TABLE 4

BURN CAGE, PANS AND RAILS AREA
RANDOM AND JUDGMENTAL SAMPLE LOCATION COORDINATES

<u>Sample No.</u>	<u>X-Axis 0 - 125</u>	<u>Y-Axis 0 - 50</u>
1	31	3
2	17	6
3	24	16
4	60	36
5	32	19
6	106	17
7	57	29
8	104	37
9 (BP-3)	9	25
10 (BP-4)	21	38
11 (BP-16)	81	13
12	115	43

TABLE 5

BURN AREA

RANDOM AND JUDGMENTAL SAMPLE LOCATION COORDINATES

<u>Sample No.</u>	<u>X-Axis 0 - 110</u>	<u>Y-Axis 0 - 50</u>
1	107	37
2	68	33
3	22	31
4	106	15
5	58	28
6	41	32
7	61	25

TABLE 6

EAST FORK DETONATION AREA
RANDOM AND JUDGMENTAL SAMPLE LOCATION COORDINATES

<u>Sample No.</u>	<u>X-Axis 0 - 70</u>	<u>Y-Axis 0 - 40</u>
1	15	11
2	57	14
3	37	9
4	66	33
5	22	20
6	2	40

TABLE 7
BACKGROUND SAMPLE AREA
RANDOM SAMPLE LOCATION COORDINATES

<u>SAMPLE NO.</u>	<u>X-AXIS 0 - 30</u>	<u>Y-AXIS 0 - 30</u>
1	28	22
2	12	23
3	1	15
4	23	23

APPENDIX A

40 CFR 261 APPENDIX VIII HAZARDOUS CONSTITUENTS
TO BE TESTED FOR

The following compounds have been selected from Appendix VIII of 40 CFR 261 as having been possibly used during production and/or research and development at the Bermite facility. The complete list of Appendix VIII constituents was reviewed by former personnel of Bermite. The compounds from Appendix VIII not listed below were not used or created at Bermite.

Antimony Compounds (NOS) - Antimony Trisulphide

Barium Compounds (NOS) - Barium Nitrate

Benzene

Beryllium

Butyl Acetate

Calcium Chromate

Carbon Disulfide

Chloroform

Dichloromethane

Dinitrobenzene

Diphenylamine

Formaldehyde

Hexachloroethane

Hydrofluoric Acid

Isobutyl Alcohol

Lead Compounds (NOS) - Lead Azide, Lead Styphnate, Lead

Methyl Ethyl Ketone

Methyl Methacrylate

Naphthalene

Nickel

Oxides

Potassium Cyanide

Potassium Perchlorate

Thallium

Toulene

1,1,1-Trichloroethane

APPENDIX B

APPENDIX B

METALS AND INORGANICS TO BE TESTED FOR

Chromium

Arsenic

Selenium

Silver

Cadmium

Barium

Mercury

Lead

Boron

Magnesium

Fluoride

1. Standard of decontamination:

The analytical parameter of interest at this unit is lead. Sampling performed on June 2, 1987 has shown that surface lead within the tanks is below .1mg per 100 cm². "Background" samples were also taken on paved roads east and west of the Bermite facility.

In order to determine a background lead level not possibly influenced by automobile exhaust or affected by abrasion of the wiping material by the sampling surface, two additional samples shall be taken and analyzed. These shall be taken from the metal roof of a building near the Bermite offices on the site if possible or one of the steel magazines near the site of the lead azide neutralizing building. In order to serve as background samples for the dry storage units, these samples shall also be analyzed for magnesium and boron, as well as total lead. Results shall be reported as mg/ft².

In addition, larger wipe samples shall be taken, at least 1 ft² in size, and using distilled water to saturate the filter paper. This will provide a lower limit of detection and improved accuracy. Results shall be reported as mg/ft².

Surface samples found to be greater than the mean of these background samples will be judged to be contaminated.

Soil samples shall be compared with the background lead levels determined in connection with the study of the open burning areas.

Samples shall be prepared prior to analysis in a manner which yields total lead.

2. Equipment verification

a. tanks

- Additional wipe samples inside the tanks shall be analyzed. One shall be taken at the bottom surface, and a second shall be taken at the lowest point in the tank, or in the lowest corner of the tank.

b. troughs

- A wipe sample shall be taken shall be taken in each trough.

c. Alternatively, the equipment may be crushed and disposed at a hazardous waste facility if testing is not desired.

3. Containment System/Concrete verification

At least one 100-gram sample of loose dust/sediment present within the containment structure shall be sampled and analyzed for total lead.

The concrete containment structure itself shall be sampled by chiseling at least 100 grams off the surface of a 1ft² area. Samples shall be taken at areas of possible drips or spills and low points. At least one sample shall be taken at the seam between the concrete base and the cinder block wall.

Samples shall be physically ground in the lab if necessary, per SW-846 and the total lead reported in mg/kg.

Alternatively, the concrete may be broken up and disposed at a hazardous waste facility if testing is not desired.

Areas of spills, leaks, cracks, seams or other discontinuities in the concrete base shall be noted and their location recorded so that soil beneath these spots may be sampled when the concrete is removed.

4. Soil verification

After the containment structure is removed, a minimum of three soil samples shall be taken. Any areas of possible contamination as noted above shall be sampled. In addition, the loading/unloading area of the treatment system shall be sampled by cores 0 - 6 inches and 6 - 12 inches and similarly analyzed.

1. Standard of decontamination:

Based upon the unburned wastes reported to have been stored in these units, the inorganic analytical parameters of interest at these units are lead, with magnesium and boron as indicator parameters. Organic parameters to be analyzed are dibutyl phthalate and diphenylamine.

Background values for lead, magnesium and boron shall be those established for the background surface sampling for the lead azide treatment area. Surface samples found to be greater than the mean of these background samples or detection of the specified organic compounds will be judged to indicate contamination.

2. Sample plan:

All wipe samples taken shall be at least 1 ft² in size. This will provide a lower limit of detection and improved accuracy.

Lab results shall be reported as mg/ft².

Wipe samples for metals shall be taken with filter paper saturated with distilled water.

Organics shall be sampled by wiping with cheesecloth saturated with acetone. Organics shall be extracted to yield total concentrations and analyzed using GC/MS or GC using a flame ionization detector for the butyl phthalate and a nitrogen-phosphorus specific detector for the diphenylamine analysis.

Samples shall be prepared prior to analysis in a manner which yields total metals.

Buildings 223 and 236

For both buildings, at least one floor area and one corner area shall be sampled for metals and organics. Use different areas for metals and organic sampling.

Portable storage units

To confirm previous decontamination and sampling, select one of the six units at random and sample at least one floor area and one corner area for metals and organics. Use different areas for metals and organic sampling.

3. Closure procedure:

CLOSURE PLAN MODIFICATION, WHITTAKER-BERMITE,
UNIT: DRY STORAGE: BLDGS 223, 236,
PORTABLE STEEL MAGAZINES 502, 504, 506,
3 PORTABLE WOODEN MAGAZINES E1, E2, E3

PAGE 2
Rev. 1

Storage buildings which are determined to be contaminated shall be steam cleaned or otherwise washed and re-tested. Condensate or wash water shall be collected, analyzed for the constituents of interest and disposed as hazardous waste if hazardous waste constituents are detected. Alternatively, the storage units may be demolished and disposed of as hazardous waste.

Structures determined to be clean may be left in place following agency acceptance of certification by the Engineer and the Owner/operator.

APPENDIX B

Proposed Changes to Sampling and
Analysis Plan for RCRA Units
Transmitted to DHS by Cover Letter Dated
December 24, 1987

PROPOSED CHANGES TO SAMPLING AND ANALYSIS PLAN FOR RCRA UNITS

I. INTRODUCTION/PROPOSED CHANGES

The Soil Sampling and Analysis Plan for the RCRA units at Bermite Division, Whittaker Corporation was written in October 1987 and was initiated with regulatory approval on November 20, 1987. This plan is part of the approved RCRA Closure Plan for this facility.

As per the plan, five initial soil samples were taken, one from each of the five RCRA units. These samples were analyzed for all Appendix VIII hazardous constituents in addition to the other specified organic and inorganic analysis. To date the soil sampling is completed at the 342 Former Surface Impoundment, the Background Sampling Area, the East Fork Detonation Area and the Burn Cage, Pans and Rails area. The samples are in different stages of analysis although no Appendix VIII hazardous constituents were found in the five initial samples.

In addition to the Appendix VIII hazardous constituents that were analyzed for, five organic compounds are required to be analyzed for in all samples from the three burning areas: East Fork Area, Burn Area and Burn Cage, Pans and Rails Area. One of the five compounds, diphenylamine is included as an Appendix VIII hazardous constituent. The other four compounds are: butyl carbitol, diphenyl guanidine, quinone and dibutyl phthalate.

It is proposed that rather than all the samples from these three areas be analyzed for the five organic compounds, that initially 20 percent of the samples from each of the three areas be analyzed for the presence of the five compounds. The remaining samples will be prepared for analysis and will only be analyzed for those compounds that are present in the initial 20 percent samples.

II. JUSTIFICATION

The three burn areas were used to destroy waste clothing and material used during the production at Bermite. The waste materials were completely burned or detonated in these areas. The soil sampling plan has been undertaken to determine the presence of soil contamination as a result of the activities at the areas. The contamination that could result as a consequence of the activities at the three burn areas is the presence of heavy metals in the soils. The metals are being analyzed for in all of the samples taken. The presence of the organic materials in the samples may indicate that the waste clothing and materials were not completely burned or destroyed. The five organic compounds indicated above were components of the powder and propellant that was possibly transferred to the clothing and material used during production of the materials containing the powder and propellant. The nature of the disposal process would most likely have destroyed all the powder and propellant. It is, therefore, unlikely that any powder or propellant remains in these three areas.

III. ANALYSIS PROCEDURE

All of the samples from the three burning areas will be taken as prescribed in the sampling plan.

The samples will all be analyzed for the metals and for pH as indicated in the Sampling Plan and the Approved Closure Plan.

The five organic compounds can all be analyzed for by EPA method 8270. All of the samples will be extracted for this analysis according to the procedures prescribed by method 8270. The samples can then be archived for up to 30 days after this extraction.

Twenty percent of the extracted samples for each of the three areas will be randomly chosen for analysis. This random choosing will be accomplished by numbering the samples from one to the greatest number of samples from the area in question. A random number generator will then be utilized to choose the samples to be analyzed. This is the same generator used to choose the soil sampling boring locations.

When the analysis results from the initial 20 percent samples are complete, the remaining samples will be analyzed for any of the five compounds detected in the initial 20 percent samples. This same procedure will be followed for each of the three burning areas.

APPENDIX C

TYPED FIELD SAMPLE LOG

FIELD SAMPLE LOG

Verification Sampling - Bermite No. 1/1 Date: 1/5/88 By: CFT

Time: 1530

Comments: getting dark

Area: 317 Area

SAMPLE I.D.

317 - 1397 - 4 thru 6

<u>DEPTH (FEET)</u>	<u>B.C.</u>	<u>OVA (PPM)</u>	<u>SAMPLE NO.</u>	<u>TIME</u>
16-16.5'	45	0	4	1550
16.5-17'	90	0	5	1550
17-17.5'	--	0		
17.5-18'	40	0	6	1555

317 - 2092 - 4 thru 6

16-16.5'	36	0	4	1635
16.5-17'	55	0	5	1635
17-17.5'	drill	0		
17.5-18'	45	0	6	1640

End of sampling for for the day

FIELD SAMPLE LOG

Verification Sampling - Bermite

No. 1/1 Date: 1/6/88 By: CFT/GS

Time: 0800

Comments: sample 6331-6 taken
previously for Appendix VIII sampling

Area: 317 Area

SAMPLE I.D.

317 - 6089 - 4 thru 6

<u>DEPTH (FEET)</u>	<u>B.C.</u>	<u>OVA (PPM)</u>	<u>SAMPLE NO.</u>	<u>TIME</u>
16-16.5'	45	0	4	0825
16.5-17'	55	0	5	0825
17-17.5'	drill	0		
17.5-18'	58	0	6	0830

317 - 7573 - 4 thru 6

16-16.5'	55	0	4	0855
16.5-17'	75 (4")	0	5	0855
17-17.5'	drill	0		
17.5-18'	66	0	6	0900

317 - 3369 - 4 thru 6

16-16.5'	66	0	4	0920
16.5-17'	90 (4")	0	5	0920
17-17.5'	drill	0		
17.5-18'	100	0	6	0925

317 - 6331 - 4 and 5

16-16.5'	2	45	4	1025
16.5-17'	2	45	5	1025
17-17.5'	-	-	-	-
17.5-18'	-	-	-	-

317 - 3752 - 4 thru 6

16-16.5'	18	30	4	1050
16.5-17'	38	30	5	1050
17-17.5'	drill	25		
17.5-18'	30	25	6	1055

317 - 0745 - 4 thru 6

16-16.5'	22	20	4	1110
16.5-17'	44	20	5	1110
17-17.5'	drill	20		
17.5-18'	40	20	6	1115

End of sampling for for the day

FIELD SAMPLE LOG

Verification Sampling - Bermite No. 1/2 Date: 12/8/87 By: CFT

Time: 0930

Comments: sunny - warm; sample 2045-4 taken previously for Appendix VIII samples

Area: 342 Area

SAMPLE I.D.

342 - 9955 - 1 thru 4

<u>DEPTH</u>	<u>B.C.</u>	<u>OVA (PPM)</u>	<u>SAMPLE NO.</u>	<u>TIME</u>
0-6"	6	0		
6-12"	11	0	1	0950
12-18"	7	0		
18-24"	9	0	2	0955
16-16.5'	18	0		
16.5-17'	20	0	3	1005
17-17.5'	16	0		
17.5-18'	23	0	4	1010

342 - 9619 - 1 thru 4

0-6"	10	0		
6-12"	15	0	1	1030
12-18"	8	0		
18-24"	9	0	2	1035
16-16.5'	25	0		
16.5-17'	27	0	3	1045
17-17.5'	15	0		
17.5-18'	17	0	4	1050

342 - 2006 - 1 thru 4

0-6"	6	0		
6-12"	9	0	1	1130
12-18"	7	0		
18-24"	6	0	2	1135
16-16.5'	17	0		
16.5-17'	23	0	3	1145
17-17.5'	22	0		
17.5-18'	38	0	4	1150

No. 2/2

342 - 2045 - 1 and 3

0-6"	7		0	
6-12"	10	0	1	1205
12-18"	7	0		
18-24"	6	0	2	1210
16-16.5'	11	0		
16.5-17'	19	0	3	1220

342 - 1333 - 1 thru 4

0-6"	6	0		
6-12"	7	0	1	1340
12-18"	5	0		
18-24"	5	0	2	1345
16-16.5'	7	0		
16.5-17'	8	0	3	1350
17-17.5'	11	0		
17.5-18'	15	0	4	1400

End of Sampling for the day

FIELD SAMPLE LOG

Verification Sampling - Bermite No. 1/4 Date: 1/5/88 By: CFT

Time: 0715

Comments: Cool, rainy, no recovery
on samples 10615-6,8

Area: Burn Area

SAMPLE I.D.

BA - 10737 - 1 thru 10

<u>DEPTH</u>	<u>B.C.</u>	<u>OVA (PPM</u>	<u>SAMPLE NO.</u>	<u>TIME</u>
0-6"	7	0	1	0745
6-12"	8	0	2	0745
12-18"	6	0		
18-24"	7	0	3	0750
24-30"	7	0		
30-36"	9	0	4	0755
36-42"	14	0		
42-48"	10	0	5	0800
48-54"	10	0		
54-60"	10	0	6	0805
60-66"	13	0		
66-72"	18	0	7	0810
72-78"	11	0		
78-84"	18	0	8	0813
84-90"	8	0		
90-96"	10	0	9	0815
96-102"	45	0		
102-108"	50 (3")	0	10	0817

BA -10615 - 1 thru 10

0-6"	3	0	1	0830
6-12"	4	0	2	0830
12-18"	4	0		
18-24"	5	0	3	0835
24-30"	7	0		
30-36"	8	0	4	0840
36-42"	7	0		
42-48"	10	0	5	0845
48-54"	no recovery			
54-60"	no recovery			
60-66"	12	0		
66-72"	13	0	7	0855
72-78"	no recovery			
78-84"	no recovery			
84-90"	15			
90-96"	45	0	9	0900
96-102"	45	0		
102-108"	65 (3")	0	10	0905

No. 2/4

Comments: No recovery on
6125-3,8

SAMPLE I.D.

<u>DEPTH</u>	<u>B.C.</u>	<u>OVA (PPM</u>	<u>SAMPLE NO.</u>	<u>TIME</u>	<u>SPLIT SAMPLE</u>
0-6"	1	0	1	0935	
6-12"	3	0	2	0935	
12-18"	7	0			
18-24"	13	0	3	0945	
24-30"	11	0			
30-36"	13	0	4	0950	
36-42"	7	0			
42-48"	5	0	5	0955	
48-54"	5	0			
54-60"	5	0	6	1000	
60-66"	7	0			
66-72"	8	0	7	1005	
72-78"	6	0			
78-84"	8	0	8	1010	*
84-90"	44	0			
90-96"	28	0	9	1015	
96-102"	48	0			
102-108"	60 (2")	0	10	1020	*

BA - 6125 - 1 thru 10

0-6"	4	0	1	1025	
6-12"	5	0	2	1025	
12-18"	drill				
18-24"	drill				
24-30"	3	0			
30-36"	4	0	4	1030	*
36-42"	3	0			
42-48"	5	0	5	1035	
48-54"	7	0			
54-60"	26	0	6	1040	*
60-66"	22	0			
66-72"	55	0	7	1045	
72-78"	drill				
78-84"	45 (1.5")	0			
84-90"	drill				
90-96"	70 (6")	0	9		
96-102"	drill				
102-108"	60	0	10	1100	*

No. 3/4

Comments: No recovery on
4132-1

SAMPLE I.D.

BA - 2231 - 1 thru 10

<u>DEPTH</u>	<u>B.C.</u>	<u>OVA (PPM</u>	<u>SAMPLE NO.</u>	<u>TIME</u>	<u>SPLIT SAMPLE</u>
0-6"	2	0	1	1125	
6-12"	6	0	2	1125	
12-18"	7	0			
18-24"	12	0	3	1130	
24-30"	7	0			
30-36"	9	0	4	1135	*
36-42"	-	0			
42-48"	-	0	5	1140	
48-54"	47	0			
54-60"	22	0	6	1145	
60-66"	12	0			
66-72"	18	0	7	1147	*
72-78"	7	0			
78-84"	21	0	8	1150	
84-90"	20	0			
90-96"	36	0	9	1155	
96-102"	22	0			
102-108"	36	0	10	1200	*

BA - 4132 - 1 thru 10

0-6"	7	0	-		
6-12"	13	0	2	1250	
12-18"	8	0			
18-24"	12	0	3	1255	
24-30"	12	0			
30-36"	12	0	4	1300	
36-42"	36	0			
42-48"	21	0	5	1305	
48-54"	14	0			
54-60"	20	0	6	1310	
60-66"	9	0			
66-72"	18	0	7	1315	
72-78"	13	0			
78-84"	19	0	8	1320	
84-90"	19	0			
90-96"	45	0	9	1325	
96-102"	40	0			
102-108"	50 (4")	0	10	1330	

No. 4/4

SAMPLE I.D.

BA - 5828 - 1 thru 10

<u>DEPTH</u>	<u>B.C.</u>	<u>OVA (PPM)</u>	<u>SAMPLE NO.</u>	<u>TIME</u>
0-6"	5	0	1	1355
6-12"	11	0	2	1355
12-18"	10	0		
18-24"	11	0	3	1400
24-30"	9	0		
30-36"	15	0	4	1405
36-42"	14	0		
42-48"	18	0	5	1410
48-54"	16	0		
54-60"	20	0	6	1415
60-66"	drill	0		
66-72"	13	0	7	1420
72-78"	13	0		
78-84"	18	0	8	1425
84-90"	14	0		
90-96"	20	0	9	1430
96-102"	20	0		
102-108"	32	0	10	1435

FIELD SAMPLE LOG

Verification Sampling - Bermite No. 1/3 Date: 12/15/87 By: CFT

Time: 1030

Comments: no recovery on
sample 2138-3

Area: Burn Cage Pans and Rails Area

SAMPLE I.D.

BCPR - 11038 - 1 thru 4

<u>DEPTH</u>	<u>B.C.</u>	<u>OVA (PPM</u>	<u>SAMPLE NO.</u>	<u>TIME</u>
0-6"	7	0	1	1045
6-12"	8	0	2	1045
12-18"	5	0		
18-24"	6	0	3	1050
24-30"	4	0		
30-36"	10	0	4	1055

BCPR - 11543 - 1 thru 4

0-6"	6	0	1	1115
6-12"	7	0	2	1115
12-18"	4	0		
18-24"	5	0	3	1120
24-30"	7	0		
30-36"	10	0	4	1125

BCPR - 10617 - 1 thru 4

0-6"	7	0	1	1150
6-12"	10	0	2	1150
12-18"	8	0		
18-24"	20	0	3	1155
24-30"	33	0		
30-36"	29	0	4	1205

BCPR - 8113 - 1 thru 4

0-6"	8	0	1	1215
6-12"	12	0	2	1215
12-18"	drill	0		
18-24"	43	0	3	1225
24-30"	14	0		
30-36"	14	0	4	1230

No. 2/3

SAMPLE I.D.

BCPR - 6036 - 1 thru 4

<u>DEPTH</u>	<u>B.C.</u>	<u>OVA (PPM</u>	<u>SAMPLE NO.</u>	<u>TIME</u>
0-6"	3	0	1	1240
6-12"	4	0	2	1240
12-18"	2	0		
18-24"	3	0	3	1245
24-30"	4	0		
30-36"	6	0	4	1250

BCPR - 5729 - 1 thru 4

0-6"	4	0	1	1305
6-12"	5	0	2	1305
12-18"	3	0		
18-24"	3	0	3	1310
24-30"	2	0		
30-36"	3	0	4	1315

BCPR - 3219 - 1 thru 4

0-6"	3	0	1	1325
6-12"	4	0	2	1325
12-18"	3	0		
18-24"	3	0	3	1330
24-30"	6	0		
30-36"	8	0	4	1335

BCPR - 2138 - 1 thru 4

0-6"	3	0	1	1325
6-12"	5	0	2	1325
12-18"	drill	0		
18-24"	drill	0		
24-30"	13	0		
30-36"	21	0	4	1345

BCPR - 2416 - 1 thru 4

0-6"	5	0	1	1325
6-12"	6	0	2	1325
12-18"	3	0		
18-24"	4	0	3	1400
24-30"	5	0		
30-36"	10	0	4	1405

No. 3/3

SAMPLE I.D.

BCPR - 3103 - 1 thru 4

<u>DEPTH</u>	<u>B.C.</u>	<u>OVA (PPM</u>	<u>SAMPLE NO.</u>	<u>TIME</u>
0-6"	6	0	1	1415
6-12"	5	0	2	1415
12-18"	3	0		
18-24"	2	0	3	1420
24-30"	6	0		
30-36"	8	0	4	1430

BCPR - 1706 - 1 thru 4

0-6"	9	0	1	1445
6-12"	8	0	2	1445
12-18"	4	0		
18-24"	3	0	3	1450
24-30"	8	0		
30-36"	9	0	4	1455

BCPR - 0925 - 1 thru 4

0-6"	3	0	1	1500
6-12"	4	0	2	1500
12-18"	3	0		
18-24"	2	0	3	1505
24-30"	2	0		
30-36"	4	0	4	1510

FIELD SAMPLE LOG

Verification Sampling - Bermite No. 1/1 Date: 12/8/87 By: CFT

Time: 1430

Comments: no recovery on sample
5714-1

Area: East Fork Area

SAMPLE I.D.

EFA - 6633 - 1 thru 9

<u>DEPTH</u>	<u>B.C.</u>	<u>OVA (PPM</u>	<u>SAMPLE NO.</u>	<u>TIME</u>
0-6"	1	0	1	1445
6-12"	3	0	2	1445
12-18"	3	0		
18-24"	4	0	3	1450
24-30"	3	0		
30-36"	2	0	4	1455
36-42"	3	0		
42-48"	6	0	5	1458
48-54"	5	0		
54-60"	7	0	6	1505
60-66"	6	0		
66-72"	8	0	7	1508
72-78"	8	0		
78-84"	13	0	8	1512
84-90"	17	0		
90-96"	35	0	9	1515

EFA - 5714 - 1 thru 9

0-6"	3		1	
6-12"	3		2	1555
12-18"	3			
18-24"	3		3	1600
24-30"	2			
30-36"	3		4	1605
36-42"	4			
42-48"	6		5	1610
48-54"	6			
54-60"	7		6	1615
60-66"	5			
66-72"	6		7	1620
72-78"	5			
78-84"	6		8	1625
84-90"	6			
90-96"	10		9	1630

FIELD SAMPLE LOG

Verification Sampling - Bermite No. 1/1 Date: 12/9/87 By: CFT

Time: 0700

Comments: Sample 3709-5 taken
previously for Appendix VIII samples

Area: East Fork Area

SAMPLE I.D.

EFA - 3709 - 1 thru 9

<u>DEPTH</u>	<u>B.C.</u>	<u>OVA (PPM</u>	<u>SAMPLE NO.</u>	<u>TIME</u>
0-6"	6	0	1	0725
6-12"	5	0	2	0725
12-18"	2	0		
18-24"	4	0	3	0730
24-30"	6	0		
30-36"	10	0	4	0735
36-42"	drill	0		
42-48"	drill	0		
48-54"	7	0		
54-60"	8	0	6	0740
60-66"	6	0		
66-72"	6	0	7	0745
72-78"	5	0		
78-84"	7	0	8	0750
84-90"	5	0		
90-96"	8	0	9	0755

EFA - 2220 - 1 thru 9

0-6"	4	0	1	0810
6-12"	5	0	2	0810
12-18"	3	0		
18-24"	5	0	3	0815
24-30"	5	0		
30-36"	7	0	4	0820
36-42"	7	0		
42-48"	9	0	5	0825
48-54"	7	0		
54-60"	8	0	6	0830
60-66"	5	0		
66-72"	7	0	7	0835
72-78"	5	0		
78-84"	7	0	8	0840
84-90"	5	0		
90-96"	6	0	9	0845

FIELD SAMPLE LOG

Verification Sampling - Bermite No. 1/1 Date: 12/15/87 By: CFT

Time: 0730

Comments:

Area: East Fork Area

SAMPLE I.D.

EFA - 1511 - 1 thru 9

<u>DEPTH</u>	<u>B.C.</u>	<u>OVA (PPM</u>	<u>SAMPLE NO.</u>	<u>TIME</u>
0-6"	5	0	1	0750
6-12"	5	0	2	0750
12-18"	5	0		
18-24"	10	0	3	0755
24-30"	8	0		
30-36"	10	0	4	0800
36-42"	9	0		
42-48"	12	0	5	0805
48-54"	9	0		
54-60"	11	0	6	0810
60-66"	7	0		
66-72"	9	0	7	0815
72-78"	6	0		
78-84"	7	0	8	0820
84-90"	5	0		
90-96"	7	0	9	0825

EFA - 0240 - 1 thru 9

0-6"	3	0	1	0830
6-12"	3	0	2	0830
12-18"	2	0		
18-24"	4	0	3	0835
24-30"	10	0		
30-36"	15	0	4	0840
36-42"	13	0		
42-48"	20	0	5	0845
48-54"	13	0		
54-60"	22	0	6	0850
60-66"	20	0		
66-72"	38	0	7	0855
72-78"	27	0		
78-84"	45	0	8	0900
84-90"	22	0		
90-96"	34	0	9	0905

FIELD SAMPLE LOG

Verification Sampling - Bermite No. 1/1 Date: 12/9/87 By: CFT

Time: Comments:

Area: Building 502 - Wipe Sampling

<u>SAMPLE I.D.</u>	<u>LOCATION</u>	<u>ANALYSIS</u>
502-1	Floor	Metals
502-2	Corner	Metals
502-3	Corner	Organics
502-4	Floor	Organics
502-5	Roof	Metals
502-6	Roof	Metals

Area: Building 236 - Wipe Sampling

236-1	Corner	Organics
236-2	Floor	Metals

FIELD SAMPLE LOG

Verification Sampling - Bermite No. 1/1 Date: 3/8/88 By: TB

Time:

Comments:

Area: Building 223 - Wipe Sampling

<u>SAMPLE I.D.</u>	<u>LOCATION</u>	<u>ANALYSIS</u>
223-1	Background	Metals
223-2	Floor	Metals
223-3	Corner	Metals
223-4	Blank	Metals
223-5	Blank	Organic
223-6	Floor	Organic

FIELD SAMPLE LOG

Verification Sampling - Bermite No. 1/1 Date: 3/21/88 By: GA

Time: 0900

Comments:

Area: Lend Azide Area

<u>SAMPLE I.D.</u>	<u>DEPTH (INCHES)</u>	<u>LOCATION</u>
207-1	0-6"	under former tanks
207-2	6-12"	under former tanks
207-3	0-6"	under former tanks
207-4	6-12"	under former tanks
207-5	0-6"	under former tanks
207-6	6-12"	under former tanks

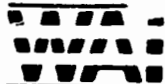
Wenck Associates, Inc.
832 Twelve Oaks Center
15500 Wayzata Blvd.
Wayzata, MN 55391

CHAIN OF CUSTODY RECORD

FIELD COORDINATOR

Christopher Thompson

PROJ. NO.		PROJECT NAME					NUMBER OF CONTAINERS	Metals - attached 2.345	MS - attached 0.545 - EPA 8340 including styrene undecane, decane EPA 8220	pH				REMARKS
SAMPLERS (Signature)														
STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION									
35-01.4	Bermite													
SAMPLERS (Signature)		Gregory W. Smith												
317-397-4	1/5	1550		✓	317 Area	1	✓	✓	✓	✓				
-5	"	1550		✓	" "	1	✓	✓	✓	✓				
-6	"	1555		✓	" "	1	✓	✓	✓	✓				
317-392-4	"	1635		✓	" "	1	✓	✓	✓	✓				
-5	"	1635		✓	" "	1	✓	✓	✓	✓				
-6	"	1640		✓	" "	1	✓	✓	✓	✓				
<hr/>														
317-369-4	1/6	0920		✓	317 AREA	1	✓	✓	✓	✓				
-5	"	0920		✓	" "	1	✓	✓	✓	✓				
-6	"	0925		✓	" "	1	✓	✓	✓	✓				
317-389-4	"	0825		✓	" "	1	✓	✓	✓	✓				
-5	"	0825		✓	" "	1	✓	✓	✓	✓				
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Relinquished by: (Signature)		Date	Time	Received by: (Signature)				
Gregory W. Smith		1/6/88	1230	Gregory W. Smith										
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Relinquished by: (Signature)		Date	Time	Received by: (Signature)				
Relinquished by: (Signature)		Date	Time	Received for Laboratory by: (Signature)		Date	Time	Remarks						



Wenck Associates, Inc.
832 Twelve Oaks Center
15500 Wayzata Blvd.
Wayzata, MN 55391

CHAIN OF CUSTODY RECORD

N: 4

FIELD COORDINATOR

Christopher Thompson

PROJ. NO. 85-01.11		PROJECT NAME Bermite				NUMBER OF CONTAINERS	Metals - attached List 5	Organics - EPA 8240 including styrene	Inorganic/derivative EPA 8260	PH					REMARKS
SAMPLERS (Signature) Gregory W. Smith															
STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION										
317- 639-6	1/6	0830		✓	317 Area	1	✓	✓	✓	✓					
317- 7573-4	"	0855		✓	"	1	✓	✓	✓	✓					
-5	"	0855		✓	"	1	✓	✓	✓	✓					
-6	"	0900		✓	"	1	✓	✓	✓	✓					
317- 2745-4	"	1110		✓	"	1	✓	✓	✓	✓					
-5	"	1110		✓	"	1	✓	✓	✓	✓					
-6	"	1115		✓	"	1	✓	✓	✓	✓					
317- 3752-4	"	1050		✓	"	1	✓	✓	✓	✓					
-5	"	1050		✓	"	1	✓	✓	✓	✓					
-6	"	1055		✓	"	1	✓	✓	✓	✓					
317- 6331-4	"	1025		✓	"	1	✓	✓	✓	✓					
-5	"	1025		✓	"	1	✓	✓	✓	✓					
Relinquished by: (Signature) Gregory W. Smith			Date 1/6/88	Time 1230	Received by: (Signature) Ernest Pelin			Relinquished by: (Signature)			Date	Time	Received by: (Signature)		
Relinquished by: (Signature)			Date	Time	Received by: (Signature)			Relinquished by: (Signature)			Date	Time	Received by: (Signature)		
Relinquished by: (Signature)			Date	Time	Received for Laboratory by: (Signature)			Date	Time	Remarks					

PROJ. NO.		PROJECT NAME				NUMBER OF CONTAINERS	Metals - List 3	Organics - List 4 EPA Method 8270	Extract for List 4 hold for Analysis	pH				REMARKS						
SAMPLERS (Signature)																				
STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION															
BA-10737-1	4/5	0745		✓	Burn Area	1	✓		✓	✓										
10737-2	"	0745		✓	" "	1	✓		✓	✓										
-3	"	0750		✓	" "	1	✓	✓	✓	✓										
-4	"	0755		✓	" "	1	✓		✓	✓										
-5	"	0800		✓	" "	1	✓		✓	✓										
-6	"	0805		✓	" "	1	✓		✓	✓										
-7	"	0810		✓	" "	1	✓	✓	✓	✓										
-8	"	0813		✓	" "	1	✓		✓	✓										
-9	"	0815		✓	" "	1	✓	✓	✓	✓										
-10	"	0817		✓	" "	1	✓		✓	✓										
BA-10615-1	"	0830		✓	" "	1	✓		✓	✓										
-2	"	0830		✓	" "	1	✓		✓	✓										
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Relinquished by: (Signature)		Date	Time	Received by: (Signature)										
Gregory W. Smith		4/6/88	1230	Emery D. O'Brien																
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Relinquished by: (Signature)		Date	Time	Received by: (Signature)										
Relinquished by: (Signature)		Date	Time	Received for Laboratory by: (Signature)		Date	Time	Remarks												

DISTRIBUTION: Original Accompanies Shipment; Copy to Coordinator Field Files

Relinquished by: (Signature)	Date	Time	Received for Laboratory by: (Signature)			

DISTRIBUTION: Original Accompanies Shipment; Copy to Coordinator Field Files

-9	"	1015	✓	"	"	1	✓	✓	✓		
-10	"	1020	✓	"	"	1	✓	✓	✓		
BA-6125-1	"	1025	✓	"	"	1	✓	✓	✓		
-2	"	1025	✓	"	"	1	✓	✓	✓		
-4	"	1030	✓	"	"	1	✓	✓	✓		
-5	"	1035	✓	"	"	1	✓	✓	✓		
-6	"	1040	✓	"	"	1	✓	✓	✓		
-7	"	1045	✓	"	"	1	✓	✓	✓		
-9	"	1055	✓	"	"	1	✓	✓	✓		
-10	"	1100	✓	"	"	1	✓	✓	✓		

DISTRIBUTION: Original Accompanies Shipment; Copy to Coordinator Field Files

-9	Y5	1155	✓	Ti	"	1	✓	✓	✓	✓			
-10	Y5	1200	✓	"	"	1	✓	✓	✓	✓			
BA-4132-42							✓		✓				
BA-4132-42	Y5	1250	✓	"	"	1	✓	✓	✓	✓			
Relinquished by: (Signature)				Date	Time	Received by: (Signature)		Relinquished by: (Signature)			Date	Time	Received by: (Signature)
Gregory W. Smith				1/6/88	1230	Emery O. Pelton							
Relinquished by: (Signature)				Date	Time	Received by: (Signature)		Relinquished by: (Signature)			Date	Time	Received by: (Signature)
Relinquished by: (Signature)				Date	Time	Received for Laboratory by: (Signature)		Date	Time	Remarks			

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CHAIN OF CUSTODY RECORD

FIELD COORDINATOR

Christopher Thompson

PROJ. NO.		PROJECT NAME					NUMBER OF CONTAINERS	List 3-Metals	List 4-Organics SMA Method 8270 Extract for 8270 Weld for Analysis	PH				REMARKS
85-01.4		BE2HITE												
SAMPLERS (Signature) <i>Gregory W. Smith</i>														
STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION									
84-5828-5	1/5	1410		✓	Burn Area		1	✓	✓	✓				
-6	"	1415		✓	" "		1	✓	✓	✓				
-7	"	1420		✓	" "		1	✓	✓	✓				
-8	"	1425		✓	" "		1	✓	✓	✓				
-9	"	1430		✓	" "		1	✓	✓	✓				
-10	"	1435		✓	" "		1	✓	✓	✓				
Relinquished by: (Signature) <i>Gregory W. Smith</i>			Date 1/6/88	Time 1230	Received by: (Signature) <i>Emery D. Peters</i>			Relinquished by: (Signature)			Date	Time	Received by: (Signature)	
Relinquished by: (Signature)			Date	Time	Received by: (Signature)			Relinquished by: (Signature)			Date	Time	Received by: (Signature)	
Relinquished by: (Signature)			Date	Time	Received for Laboratory by: (Signature)			Date	Time	Remarks				

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Christopher Thompson

PROJ. NO.		PROJECT NAME					NUMBER OF CONTAINERS	List 3	List 4	Extract for List 4 - held for possible analysis	PH	REMARKS						
85-01.4		Bermite																
SAMPLERS (Signature)																		
STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION													
EFA-1511-1	12/15	0750	✓		East Fork Area		1	✓		✓	✓							
EFA-1511-2	12/15	0750	✓		" " "		1	✓		✓	✓							
EFA-1511-3	12/15	0755	✓		" " "		1	✓		✓	✓							
EFA-1511-4	12/15	0800	✓		" " "		1	✓		✓	✓							
EFA-1511-5	12/15	0805	✓		" " "		1	✓	✓		✓							
EFA-1511-6	12/15	0810	✓		" " "		1	✓		✓	✓							
EFA-1511-7	12/15	0815	✓		" " "		1	✓		✓	✓							
EFA-1511-8	12/15	0820	✓		" " "		1	✓		✓	✓							
EFA-1511-9	12/15	0825	✓		" " "		1	✓	✓		✓							
EFA-0240-1	12/15	0830	✓		" " "		1	✓	✓		✓							
EFA-0240-2	12/15	0830	✓		" " "		1	✓		✓	✓							
EFA-0240-3	12/15	0835	✓		" " "		1	✓		✓	✓							
Relinquished by: (Signature)			Date		Time		Received by: (Signature)			Relinquished by: (Signature)			Date		Time		Received by: (Signature)	
			12/15/07		2045													
Relinquished by: (Signature)			Date		Time		Received by: (Signature)			Relinquished by: (Signature)			Date		Time		Received by: (Signature)	
Relinquished by: (Signature)			Date		Time		Received for Laboratory by: (Signature)			Date		Time		Remarks				

N?

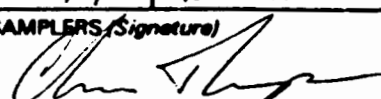
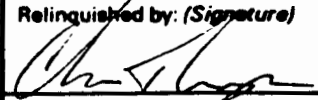
?

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CHAIN OF CUSTODY RECORD

FIELD COORDINATOR

Christopher Thompson

PROJ. NO.		PROJECT NAME					NUMBER OF CONTAINERS	List 3	List 4	Extract for List 4, hold for possible analysis	PH	REMARKS	
85-01.4		Bermite											
SAMPLERS (Signature)													
													
STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION								
EFA-0240-4	12/15	0840	✓		East Fork Area		1	✓		✓	✓		
EFA-0240-5	12/15	0845	✓		" " "		1	✓		✓	✓		
EFA-0240-6	12/15	0850	✓		" " "		1	✓		✓	✓		
EFA-0240-7	12/15	0855	✓		" " "		1	✓		✓	✓		
EFA-0240-8	12/15	0900	✓		" " "		1	✓	✓		✓		
EFA-0240-9	12/15	0905	✓		" " "		1	✓		✓	✓		
BCPR-11038-1	12/15	1045	✓		Burn Cage, Panso Rails Area		1	✓			✓		
BCPR-11038-2	12/15	1045	✓		" " "		1	✓		✓	✓		
BCPR-11038-3	12/15	1050	✓		" " "		1	✓		✓	✓		
BCPR-11038-4	12/15	1055	✓		" " "		1	✓		✓	✓		
BCPR-11543-1	12/15	1115	✓		" " "		1	✓		✓	✓		
BCPR-11543-2	12/15	1115	✓		" " "		1	✓		✓	✓		
Relinquished by: (Signature)			Date	Time	Received by: (Signature)			Relinquished by: (Signature)			Date	Time	Received by: (Signature)
			12/15/87	2045									
Relinquished by: (Signature)			Date	Time	Received by: (Signature)			Relinquished by: (Signature)			Date	Time	Received by: (Signature)
Relinquished by: (Signature)			Date	Time	Received for Laboratory by: (Signature)			Date	Time	Remarks			

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CHAIN OF CUSTODY RECORD

FIELD COORDINATOR

Christopher Thompson

PROJ. NO.		PROJECT NAME					NUMBER OF CONTAINERS	List 3	List 4	Extract for List 4, hold for possible analysis	PH	REMARKS
85-01.4		Bernite										
SAMPLERS (Signature) <i>Christopher Thompson</i>												
STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION							
BCPR-11543-3	12/15	1120	✓		Burn Cage, Pans & Rails Area	1	✓		✓	✓		
BCPR-11543-4	"	1125	✓		" " "	1	✓		✓	✓		
BCPR-10617-1	"	1150	✓		" " "	1	✓	✓		✓		
BCPR-10617-2	"	1150	✓		" " "	1	✓		✓	✓		
BCPR-10617-3	"	1155	✓		" " "	1	✓	✓		✓		
BCPR-10617-4	"	1205	✓		" " "	1	✓		✓	✓		
BCPR-B113-1	"	1215	✓		" " "	1	✓		✓	✓		
BCPR-B113-2	"	1215	✓		" " "	1	✓		✓	✓		
BCPR-B113-3	"	1225	✓		" " "	1	✓		✓	✓		
BCPR-B113-4	"	1230	✓		" " "	1	✓	✓		✓		
BCPR-6036-1	"	1240	✓		" " "	1	✓		✓	✓		
BCPR-6036-2	"	1240	✓		" " "	1	✓	✓		✓		

Relinquished by: (Signature) <i>Christopher Thompson</i>	Date 12/15/07	Time 2045	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
Relinquished by: (Signature)	Date	Time	Received for Laboratory by: (Signature)	Date	Time	Remarks	

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CHAIN OF CUSTODY RECORD

FIELD COORDINATOR

Christopher Thompson

PROJ. NO.		PROJECT NAME					NUMBER OF CONTAINERS	LIST 3	LIST 4	Extract for List 4 held for possible analysis	pH	REMARKS
85-01.4		Bermite										
SAMPLERS (Signature) <i>Chris Thompson</i>												
STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION							
BCPR-6036-3	12/15	1245	✓		Burn Cage, Pans + Rails Area		1	✓		✓	✓	
BCPR-6036-4	"	1250	✓		" " "		1	✓		✓	✓	
BCPR-5729-1	"	1305	✓		" " "		1	✓		✓	✓	
BCPR-5729-2	"	1305	✓		" " "		1	✓		✓	✓	
BCPR-5729-3	"	1310	✓		" " "		1	✓		✓	✓	
BCPR-5729-4	"	1315	✓		" " "		1	✓		✓	✓	
BCPR-3219-1	"	1325	✓		" " "		1	✓	✓		✓	
BCPR-3219-2	"	1325	✓		" " "		1	✓		✓	✓	
BCPR-3219-3	"	1330	✓		" " "		1	✓		✓	✓	
BCPR-3219-4	"	1335	✓		" " "		1	✓		✓	✓	
BCPR-2138-1	"	1340	✓		" " "		1	✓		✓	✓	
BCPR-2138-2	"	1340	✓		" " "		1	✓		✓	✓	

Relinquished by: (Signature) <i>Chris Thompson</i>	Date 12/15/87	Time 2045	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
Relinquished by: (Signature)	Date	Time	Received for Laboratory by: (Signature)	Date	Time	Remarks	

Nº 5



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CHAIN OF CUSTODY RECORD

FIELD COORDINATOR

Christopher Thompson

PROJ. NO.		PROJECT NAME					NUMBER OF CONTAINERS	List 3	List 4 extract for List 4, hold for possible analysis	PH	REMARKS
85-01.4		Bernite									
SAMPLERS (Signature) <i>Chris Thompson</i>											
STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION						
BCPR-2138-4	12/15	1345	✓		Burn Cage, Pans & Rails Area	1	✓	✓	✓		
BCPR-2416-1	"	1355	✓		" " "	1	✓	✓	✓		
BCPR-2416-2	"	1355	✓		" " "	1	✓	✓	✓		
BCPR-2416-3	"	1400	✓		" " "	1	✓	✓	✓		
BCPR-2416-4	"	1405	✓		" " "	1	✓	✓	✓		
BCPR-3103-1	"	1415	✓		" " "	1	✓	✓	✓		
BCPR-3103-2	"	1415	✓		" " "	1	✓	✓	✓		
BCPR-3103-3	"	1420	✓		" " "	1	✓	✓	✓		
BCPR-3103-4	"	1430	✓		" " "	1	✓	✓	✓		
BCPR-1706-1	"	1445	✓		" " "	1	✓	✓	✓		
BCPR-1706-2	"	1445	✓		" " "	1	✓	✓	✓		
BCPR-1706-3	"	1450	✓		" " "	1	✓	✓	✓		

Relinquished by: (Signature) <i>Chris Thompson</i>	Date 12/15/87	Time 2045	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
Relinquished by: (Signature)	Date	Time	Received for Laboratory by: (Signature)	Date	Time	Remarks	

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CHAIN OF CUSTODY RECORD

FIELD COORDINATOR

Christopher Thompson

PROJ. NO.		PROJECT NAME					NUMBER OF CONTAINERS	L13+3	L13+4	extract for L13+4, hold for possible analysis	PH	REMARKS	
85-01.4		Bermite											
SAMPLERS (Signature)													
<i>[Signature]</i>													
STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION								
* BCPR-1706-4	12/15	1455	✓		Bush Ridge, Pave + Rails Area		1	✓	✓		✓		
BCPR-0925-1	"	1500	✓		" " "		1	✓	✓		✓		
BCPR-0925-2	"	1500	✓		" " "		1	✓	✓		✓		
BCPR-0925-3	"	1505	✓		" " "		1	✓	✓		✓		
BCPR-0925-4	"	1510	✓		" " "		1	✓	✓		✓		
Relinquished by: (Signature)			Date	Time	Received by: (Signature)			Relinquished by: (Signature)			Date	Time	Received by: (Signature)
<i>[Signature]</i>			12/15/2045										
Relinquished by: (Signature)			Date	Time	Received by: (Signature)			Relinquished by: (Signature)			Date	Time	Received by: (Signature)
Relinquished by: (Signature)			Date	Time	Received for Laboratory by: (Signature)			Date	Time	Remarks			

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CHAIN OF CUSTODY RECORD

FIELD COORDINATOR

GLEN ABOUN-NUR

PROJ. NO.		PROJECT NAME					NUMBER OF CONTAINERS	TOTAL LEAD							REMARKS
SAMPLERS (Signature)															
STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION										
207-1	3/21/88	1015			LEAD AZIDE AREA 0-6"		1	✓							
207-2	3/21/88	1015			" "6-12"		1	✓							
207-3	3/21/88	1020			" "0-6"		1	✓							
207-4	3/21/88	1020			" "6-12"		1	✓							
207-5	3/21/88	1025			" "0-6"		1	✓							
207-6	3/21/88	1025			" "6-12"		1	✓							
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Relinquished by: (Signature)		Date	Time	Received by: (Signature)					
		3/21/88	11:30												
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Relinquished by: (Signature)		Date	Time	Received by: (Signature)					
Relinquished by: (Signature)		Date	Time	Received for Laboratory by: (Signature)		Date	Time	Remarks							



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CHAIN OF CUSTODY RECORD

FIELD COORDINATOR

TIM BRICKER

PROJ. NO.		PROJECT NAME				NUMBER OF CONTAINERS	METALS 7420/610	8270 GCMS					REMARKS
SAMPLERS (Signature)													
STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION								
	3/7/88	0900			SAMPLE #1 BACKGROUND	1	✓						SAMPLES #1-4 ✓ FOR TOTAL LEAD, MAGNESIUM, BORON
	3/7/88	0900			#2 BLDG. 223	1	✓						
	3/7/88	0900			#3 BLDG. 223	1	✓						
	3/7/88	0900			#4 BLDG 223 BLANK	1	✓						
	3/7/88	0900			#5 BLDG. 223 BLANK	1		✓					
	3/7/88	0900			#6 BLDG. 223	1		✓					
													SAMPLES #5-6 ✓ FOR DBUTYL PHTHALATE / TOTAL ORGANIC CONCENTRATION
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Relinquished by: (Signature)		Date	Time	Received by: (Signature)			
<i>Tim Bricker</i>		3/8/88	0740	<i>Bonny Boen</i>									
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Relinquished by: (Signature)		Date	Time	Received by: (Signature)			
Relinquished by: (Signature)		Date	Time	Received for Laboratory by: (Signature)		Date	Time	Remarks					

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CHAIN OF CUSTODY RECORD

FIELD COORDINATOR

Christopher Thompson

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CHAIN OF CUSTODY RECORD

FIELD COORDINATOR

Chris Thompson

PROJ. NO.		PROJECT NAME					NUMBER OF CONTAINERS	List 3	Archive for possible later analysis	pH					REMARKS
85-01.4		Bermite													
SAMPLERS (Signature)															
STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION										
342-9955-1	12/8	0950	✓		342 Area	1	✓								0-12" lower sleeve
342-9955-2	12/8	0955	✓		" "	1	✓		✓						12-24" " "
342-9955-3	12/8	1005	✓		" "	1	✓								16'-17' " "
342-9955-4	12/8	1010	✓		" "	1	✓		✓						17'-18' " "
342-9619-1	12/8	1030	✓		" "	1	✓								0-12" " "
342-9619-2	12/8	1035	✓		" "	1	✓		✓						12-24" " "
342-9619-3	12/8	1045	✓		" "	1	✓								16'-17' " "
342-9619-4	12/8	1050 113	✓		" "	1	✓		✓						17'-18' " "
342-2006-1	12/8	1130	✓		" "	1	✓								0-12" " "
342-2006-2	12/8	1135	✓		" "	1	✓		✓						12-24" " "
342-2006-3	12/8	1145	✓		" "	1	✓								16'-17' " "
342-2006-4	12/8	1150	✓		" "	1	✓		✓						17'-18' " "
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Relinquished by: (Signature)		Date	Time	Received by: (Signature)					
<i>Chris Thompson</i>		12/8/87	1725	<i>John Quinn</i>											
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Relinquished by: (Signature)		Date	Time	Received by: (Signature)					
Relinquished by: (Signature)		Date	Time	Received for Laboratory by: (Signature)		Date	Time	Remarks							

CHAIN OF CUSTODY RECORD

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Chris Thompson

PROJ. NO.		PROJECT NAME					NUMBER OF CONTAINERS	List 3	List 4	Extract for list 4 - held for possible contamination	Archive for possible later analysis (if needed)	pH	REMARKS
85-01-4		Bermite											
SAMPLERS (Signature)													
STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION								
342-2045-1	12/8	1205	✓		342 Area		1				✓		0-12" lower skewe
342-2045-2	12/8	1210	✓		" "		1	✓			✓		12-24" " "
342-2045-3	12/8	1220	✓		" "		1				✓		16'-17' " "
342-1333-1	12/8	1340	✓		" "		1				✓		0-12" " "
342-1333-2	12/8	1345	✓		" "		1	✓			✓		12-24" " "
342-1333-3	12/8	1350	✓		" "		1				✓		16'-17' " "
342-1333-4	12/8	1400	✓		" "		1	✓			✓		17'-18' " "
EFA-6633-1	12/8	1445			East Fork Area		1	✓	✓		✓		0-6"
EFA-6633-2	12/8	1445			" " "		1	✓		✓	✓		6-12"
EFA-6633-3	12/8	1450			" " "		1	✓		✓	✓		12"-24" lower skewe
EFA-6633-4	12/8	1455			" " "		1	✓		✓	✓		24-36" " "
EFA-6633-5	12/8	1458			" " "		1	✓	✓		✓		36-48" " "
Relinquished by: (Signature)			Date	Time	Received by: (Signature)			Relinquished by: (Signature)			Date	Time	Received by: (Signature)
			12/9/87	1225	John Quinn								
Relinquished by: (Signature)			Date	Time	Received by: (Signature)			Relinquished by: (Signature)			Date	Time	Received by: (Signature)
Relinquished by: (Signature)			Date	Time	Received for Laboratory by: (Signature)			Date	Time	Remarks			

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Date

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CHAIN OF CUSTODY RECORD

FIELD COORDINATOR

Chris Thompson

PROJ. NO. 85-01.4	PROJECT NAME Bermite					NUMBER OF CONTAINERS	List 3	List 4	Exempt for list 4 hold for possible analysis	pH				REMARKS
SAMPLERS (Signature) 														
STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION									
EFA-6633-6	12/8	1505	✓		East Fork Area	1	✓	✓	✓				48"-60" lower sleeve	
EFA-6633-7	12/8	1508	✓		" " "	1	✓	✓	✓				60"-72" " "	
EFA-6633-8	12/8	1512	✓		" " "	1	✓	✓	✓				72"-84" " "	
EFA-6633-9	12/8	1515	✓		" " "	1	✓	✓	✓				84"-96" " "	
EFA-5714-2	12/8	1555	✓		" " "	1	✓	✓	✓				6"-12" + +	
EFA-5714-3	12/8	1600	✓		" " "	1	✓	✓	✓				12"-24" lower sleeve	
EFA-5714-4	12/8	1605	✓		" " "	1	✓	✓	✓				24"-36" " "	
EFA-5714-5	12/8	1610	✓		" " "	1	✓	✓	✓				36"-48" " "	
EFA-5714-6	12/8	1615	✓		" " "	1	✓	✓	✓				48"-60" " "	
EFA-5714-7	12/8	1620	✓		" " "	1	✓	✓	✓				60"-72" " "	
EFA-5714-8	12/8	1625	✓		" " "	1	✓	✓	✓				72"-84" " "	
EFA-5714-9	12/8	1630	✓		" " "	1	✓	✓	✓				84"-96" " "	

Relinquished by: (Signature) 	Date 12/8/87	Time 1725	Received by: (Signature) John Lunn	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
Relinquished by: (Signature)	Date	Time	Received for Laboratory by: (Signature)	Date	Time	Remarks	

Nº 4



Wenck Associates, Inc.
832 Twelve Oaks Center
15500 Wayzata Blvd.
Wayzata, MN 55391

CHAIN OF CUSTODY RECORD

FIELD COORDINATOR

Chris Thompson

PROJ. NO.		PROJECT NAME					NUMBER OF CONTAINERS	List 3	List 4	Exempt for List 4 hold for possible use	PH			REMARKS
85-01.4		Berwite												
SAMPLERS (Signature)														
STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION									
EFA-3709-1	12/9	0725	-		East Fork Area		1	✓		✓	✓			0-6"
EFA-3709-2	12/9	0725	-		" " "		1	✓		✓	✓			6"-12"
EFA-3709-3	12/9	0730	✓		" " "		1	✓		✓	✓			12"-24" lower sleeve
EFA-3709-4	12/9	0735	✓		" " "		1	✓		✓	✓			24"-36" " "
EFA-3709-6	12/9	0740	✓		" " "		1	✓		✓	✓			48"-60" " "
EFA-3709-7	12/9	0745	✓		" " "		1	✓		✓	✓			60"-72" " "
EFA-3709-8	12/9	0750	✓		" " "		1	✓		✓	✓			72"-84" " "
EFA-3709-9	12/9	0755	✓		" " "		1	✓		✓	✓			84"-96" " "
EFA-3709-10	12/9													
EFA-2220-1	12/9	0810	-		" " "		1	✓	✓		✓			0-6"
EFA-2220-2	12/9	0810	✓		" " "		1	✓		✓	✓			6"-12"
EFA-2220-3	12/9	0815	✓		" " "		1	✓		✓	✓			12"-24" lower sleeve
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Relinquished by: (Signature)		Date	Time	Received by: (Signature)				
		12/9/87	1725	John Zenni										
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Relinquished by: (Signature)		Date	Time	Received by: (Signature)				
Relinquished by: (Signature)		Date	Time	Received for Laboratory by: (Signature)		Date	Time	Remarks						



Wenck Associates, Inc.
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Wayzata, MN 55391

CHAIN OF CUSTODY RECORD

FIELD COORDINATOR

Chris Thompson

PROJ. NO.	PROJECT NAME	NUMBER OF CONTAINERS										REMARKS
STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION	1-6"skare	List 3A	PH				
BGA-0115-1	11/20	0700	✓		Background Area	✓	✓					Analyze Sample for 15 metals on List 3A per EPA SW 846, 3 rd ed.
BGA-0115-2	11/20	0700	✓		" "	✓	✓					"
BGA-0115-3	11/20	0710	✓		" "	✓	✓					"
BGA-0115-4	"	0730	✓		" "	✓	✓					"
BGA-0115-5	"	0745	✓		" "	✓	✓					"
BGA-0115-6	"	0755	✓		" "	✓	✓					"
BGA-1223-1	"	1000	✓		" "	✓	✓					"
BGA-1223-2	"	1000	✓		" "	✓	✓					"
BGA-1223-3	"	1005	✓		" "	✓	✓					"
BGA-1223-4	"	1010	✓		" "	✓	✓					"
BGA-1223-5	"	1015	✓		" "	✓	✓					"
BGA-1223-6	"	1025	✓		" "	✓	✓					"

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
Chris Thompson	11/20/87	12:15 PM	John Zimm				
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
Relinquished by: (Signature)	Date	Time	Received for Laboratory by: (Signature)	Date	Time	Remarks	

Nº

Wenck Associates, Inc.
832 Twelve Oaks Center
15500 Wayzata Blvd.
Wayzata, MN 55391

FIELD COORDINATOR

Chris Thompson

CHAIN OF CUSTODY RECORD

PROJ. NO.		PROJECT NAME				NUMBER OF CONTAINERS	List 3A	PH						REMARKS
85-01.4		Bermite												
SAMPLERS (Signature)														
STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION									
BGA-2323-1	11/20	0915	✓		Background Area	1-6" stone	✓	✓					Analyze Sample for 15 metals on List 3A per EPA SW846, 3 rd ed.	
BGA-2323-2	"	0915	✓		"	"	✓	✓					"	
BGA-2323-3	"	0925	✓		"	"	✓	✓					"	
BGA-2323-4	"	0930	✓		"	"	✓	✓					"	
BGA-2323-5	"	0935	✓		"	"	✓	✓					"	
BGA-2323-6	"	0945	✓		"	"	✓	✓					"	
BGA-2822-1	"	0810	✓		"	"	✓	✓					"	
BGA-2822-2	"	0810	✓		"	"	✓	✓					"	
BGA-2822-3	"	0820	✓		"	"	✓	✓					"	
BGA-2822-4	"	0830	✓		"	"	✓	✓					"	
BGA-2822-5	"	0840	✓		"	"	✓	✓					"	
BGA-2822-6	"	0850	✓		"	"	✓	✓					"	
Relinquished by: (Signature)			Date	Time	Received by: (Signature)			Relinquished by: (Signature)			Date	Time	Received by: (Signature)	
Relinquished by: (Signature)			Date	Time	Received by: (Signature)			Relinquished by: (Signature)			Date	Time	Received by: (Signature)	
Relinquished by: (Signature)			Date	Time	Received for Laboratory by: (Signature)			Date	Time	Remarks				

DISTRIBUTION: Original Accompanies Shipment; Copy to Coordinator Field Files

Wenck Associates, Inc.
832 Twelve Oaks Center
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Wayzata, MN 55391

CHAIN OF CUSTODY RECORD

FIELD COORDINATOR

Chris Thompson

PROJ. NO.		PROJECT NAME				NUMBER OF CONTAINERS	List 1	PH	List 4	List 3	List 2	pH	REMARKS
85-01.4		Bermite											
SAMPLERS (Signature) Chris Thompson													
STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION								
EFA-3709-5	11/19	0905	-		East Fork Area	2-6" sleeve	✓	PH	✓	✓		✓	Analyze for items on referenced Lists - Analyze lower sleeve
342-2045-4	11/19	0955	-		342 Area	2-6" sleeve	✓		✓			✓	Analyze for items on referenced Lists Analyze lower sleeve
317-6331-1	11/19	1100	-		317 Area	1-6" sleeve	✓		✓	✓		✓	Hold subsample for cyanide + Formaldehyde Extract for B270, hold for B270 Analysis
317-6331-2	11/19	1100	-		"	1-6" sleeve	✓		✓	✓		✓	"
317-6331-3	11/19	1105	-		"	2-6" sleeve	✓		✓	✓		✓	"
317-6331-4	11/19	1120	-		"	1-6" sleeve	✓		✓	✓		✓	"
317-6331-5	11/19	1120	-		"	1-6" sleeve	✓		✓	✓		✓	"
317-6331-6	11/19	1130	-		"	2-6" sleeve	✓	PH	✓	✓		✓	Analyze for items on referenced Lists Analyze lower sleeve
317-0745-1	11/19	1220	-		"	1-6" sleeve	✓		✓	✓		✓	Hold for subsample for cyanide + Formaldehyde Extract for B270, hold for B270 Analysis
317-0745-2	11/19	1220	-		"	1-6" sleeve	✓		✓	✓		✓	"
317-0745-3	11/19	1230	-		"	2-6" sleeves	✓		✓	✓		✓	"
317-1397-1	11/19	1245	-		"	1-6" sleeve	✓		✓	✓		✓	"
Relinquished by: (Signature) Chris Thompson		Date 11/20/87	Time 12:15 PM	Received by: (Signature) John Zucchi		Relinquished by: (Signature)		Date	Time	Received by: (Signature)			
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Relinquished by: (Signature)		Date	Time	Received by: (Signature)			
Relinquished by: (Signature)		Date	Time	Received for Laboratory by: (Signature)		Date	Time	Remarks					

Nº

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832 Twelve Oaks Center
15500 Wayzata Blvd.
Wayzata, MN 55391

FIELD COORDINATOR

CHAIN OF CUSTODY RECORD

PROJ. NO.		PROJECT NAME				NUMBER OF CONTAINERS	List 2	List 3	List 1	AD	REMARKS
85-014		Bermite									
SAMPLERS (Signature) <i>[Signature]</i>											
STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION						
317-1397-2	11/19	1245	✓		317 Area	1-6" sleeve	✓	✓	✓	Hold subsample for cyanide & Formaldehyde Extract for 8270, Hold for 8270 Analysis	
317-1397-3	11/19	1250	✓		"	2-6" sleeves	✓	✓	✓	"	
317-2092-1	11/19	1305	✓		"	1-6" sleeve	✓	✓	✓	"	
317-2092-2	11/19	1305	✓		"	1-6" sleeve	✓	✓	✓	"	
317-2092-3	11/19	1315	✓		"	2-6" sleeves	✓	✓	✓	"	
317-3369-1	11/19	1330	✓		"	1-6" sleeve	✓	✓	✓	"	
317-3369-2	11/19	1330	✓		"	1-6" sleeve	✓	✓	✓	"	
317-3369-3	11/19	1340	✓		"	2-6" sleeve	✓	✓	✓	"	
317-3752-1	11/19	1355	✓		"	1-6" sleeve	✓	✓	✓	"	
317-3752-2	11/19	1355	✓		"	1-6" sleeve	✓	✓	✓	"	
317-3752-3	11/19	1405	✓		"	2-6" sleeve	✓	✓	✓	"	
317-6089-1	11/19	1425	✓		"	1-6" sleeve	✓	✓	✓	"	
Relinquished by: (Signature) <i>[Signature]</i>		Date 11/20/87	Time 12:15 PM	Received by: (Signature) John Lujan		Relinquished by: (Signature)		Date	Time	Received by: (Signature)	
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Relinquished by: (Signature)		Date	Time	Received by: (Signature)	
Relinquished by: (Signature)		Date	Time	Received for Laboratory by: (Signature)		Date	Time	Remarks			

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94119-1

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-6331-1

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	4	* 3
Barium	6010	54	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	4	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	7	* 5
Calcium	6010	1800	*1000
Magnesium	6010	2200	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Bredt

Paul Bredt
Environmental Chemist
PB/JFQ:mel

John F. Quinn

John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94119-2

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-6331-2

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	4	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Copper	7420	ND	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	ND	* 5
Calcium	6010	1400	*1000
Magnesium	6010	1800	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul B. Brett
Paul Brett
Environmental Chemist
PB/JFQ:mel

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94119-3

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-6331-3

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	ND	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	4	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	6	* 5
Calcium	6010	2000	*1000
Magnesium	6010	2200	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Bredt
Paul Bredt
Environmental Chemist
PB/JFQ:me1

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

DATE ANALYZED: 12/02/87

LAB. NO.: 94119-4

SAMPLE I.D.: 317-6331-4

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	ND	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	4	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	6	* 5
Calcium	6010	1700	*1000
Magnesium	6010	2200	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Bredt
Paul Bredt
Environmental Chemist
PB/JFQ:mel

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94119-5

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-6331-5

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	ND	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	4	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	ND	* 5
Calcium	6010	1700	*1000
Magnesium	6010	1600	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul B. Brett

Paul Brett
Environmental Chemist
PB/JFQ:me1

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94119-6

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-6331-6

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	ND	* 3
Barium	6010	78	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	ND	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	ND	* 5
Calcium	6010	1700	*1000
Magnesium	6010	1500	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul B. Brett

Paul Brett
Environmental Chemist
PB/JFQ:mel

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94119-7

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-0745-1

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	4	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	4	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	8	* 5
Calcium	6010	2000	*1000
Magnesium	6010	2700	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Bredt

Paul Bredt
Environmental Chemist
PB/JFQ:me1

John F. Quinn

John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94119-8

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-0745-2

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	3	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	4	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	7	* 5
Calcium	6010	1700	*1000
Magnesium	6010	2000	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Brett

Paul Brett
Environmental Chemist
PB/JFQ:me1

John F. Quinn

John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94119-9

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-0745-3

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	ND	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	ND	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	ND	* 5
Calcium	6010	1500	*1000
Magnesium	6010	1800	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Brett

Paul Brett
Environmental Chemist
PB/JFQ:mel

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94119-10

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-1397-1

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	ND	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	4	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	ND	* 5
Calcium	6010	4900	*1000
Magnesium	6010	1700	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul B. Brett

Paul Brett
Environmental Chemist
PB/JFQ:me1

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94119-11

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-1397-2

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	5	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	4	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	8	* 5
Calcium	6010	1900	*1000
Magnesium	6010	2100	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Brett

Paul Brett
Environmental Chemist
PB/JFQ:me1

John F. Quinn

John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94119-12

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-1397-3

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	3	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	6	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	7	* 5
Calcium	6010	1800	*1000
Magnesium	6010	1900	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Brett

Paul Brett
Environmental Chemist
PB/JFQ:mel

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/

DATE RECEIVED: 11/25/

DATE SAMPLED: 11/25/

DATE ANALYZED: 12/02/

LAB. NO.: 94119-13

SAMPLE I.D.: 317-2092-1

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	3	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	4	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	8	* 5
Calcium	6010	1900	*1000
Magnesium	6010	2500	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Brett
Paul Brett
Environmental Chemist
PB/JFQ:me1

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemis

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94119-14

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-2092-2

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	4	* 3
Barium	6010	58	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	4	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	9	* 5
Calcium	6010	2400	*1000
Magnesium	6010	2600	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Brett
Paul Brett
Environmental Chemist
PB/JFQ:mel

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94119-15

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-2092-~~2~~3

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	ND	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	4	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	7	* 5
Calcium	6010	1800	*1000
Magnesium	6010	1500	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Bredt
Paul Bredt
Environmental Chemist
PB/JFQ:me1

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94119-16

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-3369-1

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	4	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	6	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	8	* 5
Calcium	6010	2000	*1000
Magnesium	6010	2300	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Bredt

Paul Bredt
Environmental Chemist
PB/JFQ:me1

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94119-17

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-3369-2

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	ND	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	4	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	7	* 5
Calcium	6010	1900	*1000
Magnesium	6010	2100	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Bredt

Paul Bredt
Environmental Chemist
PB/JFQ:me1

John F. Quinn

John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94119-18

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-3369-3

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	5	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	6	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	9	* 5
Calcium	6010	1900	*1000
Magnesium	6010	2200	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Brett

Paul Brett
Environmental Chemist
PB/JFQ:mel

John F. Quinn

John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94119-19

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-3752-1

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	5	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	4	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	11	* 5
Calcium	6010	2200	*1000
Magnesium	6010	2900	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul B. Brett

Paul Brett
Environmental Chemist
PB/JFQ:me1

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94119-20

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-3752-2

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	4	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	4	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	9	* 5
Calcium	6010	2100	*1000
Magnesium	6010	2300	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Brett

Paul Brett
Environmental Chemist
PB/JFQ:mel

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94119-21

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-3752-3

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	3	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	4	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	8	* 5
Calcium	6010	1800	*1000
Magnesium	6010	2200	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul B. Brett
Paul Brett
Environmental Chemist
PB/JFQ:me1

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94119-22

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-6089-1

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	4	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	4	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	8	* 5
Calcium	6010	2100	*1000
Magnesium	6010	2500	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Bredt

Paul Bredt
Environmental Chemist
PB/JFQ:me1

John F. Quinn

John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94119-23

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-6089-2

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	ND	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	ND	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	6	* 5
Calcium	6010	2200	*1000
Magnesium	6010	1800	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Bredt

Paul Bredt
Environmental Chemist
PB/JFQ:mel

John F. Quinn

John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94119-24

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-6089-3

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	3	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	ND	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	5	* 5
Calcium	6010	2200	*1000
Magnesium	6010	1600	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Bredt
Paul Bredt
Environmental Chemist
PB/JFQ:mel

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94119-25

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-7573-1

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	3	* 3
Barium	6010	54	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	4	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	7	* 5
Calcium	6010	2100	*1000
Magnesium	6010	2300	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Brett

Paul Brett
Environmental Chemist
PB/JFQ:mel

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94119-26

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-7573-2

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	4	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	4	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	8	* 5
Calcium	6010	2000	*1000
Magnesium	6010	2300	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Brett

Paul Brett
Environmental Chemist
PB/JFQ:mel

John F. Quinn

John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94119-27

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-7573-3

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	3	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	0.6	*0.5
Chromium	7191	ND	*50
Lead	7420	4	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	7	* 5
Calcium	6010	1900	*1000
Magnesium	6010	2100	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul B. Brett

Paul Brett
Environmental Chemist
PB/JFQ:mel

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94120-1

DATE ANALYZED: 12/02/87

SAMPLE I.D.: BA-6125-3

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	5	* 3
Barium	6010	72	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	1.0	*0.5
Chromium	7191	ND	*50
Lead	7420	18	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	10	* 5
Calcium	6010	2900	*1000
Magnesium	6010	2200	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Brett
Paul Brett
Environmental Chemist
PB/JFQ:mel

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94120-2

DATE ANALYZED: 12/02/87

SAMPLE I.D.: BCPR-2138-3

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	4	* 3
Barium	6010	77	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	1.5	*0.5
Chromium	7191	ND	*50
Lead	7420	50	* 3
Nickel	7520	16	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	10	* 5
Calcium	6010	3800	*1000
Magnesium	6010	1900	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Bredt

Paul Bredt
Environmental Chemist
PB/JFQ:mel

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94120-3

DATE ANALYZED: 12/02/87

SAMPLE I.D.: EFA-3709-5

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	6	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	4	* 3
Nickel	7520	10	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	9	* 5
Calcium	6010	6000	*1000
Magnesium	6010	2700	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul B. Brett
Paul Brett
Environmental Chemist
PB/JFQ:mel

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94120-4

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 342-2045-4

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	6	* 3
Barium	6010	55	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	ND	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	7	* 5
Calcium	6010	2100	*1000
Magnesium	6010	2200	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Brett
Paul Brett
Environmental Chemist
PB/JFQ:mel

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

January 22, 1988

Lab No.: 94118, 94119 & 94120

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Gentlemen:

RE: FLUORIDE RESULTS

Presented below are the results of the analyses conducted on your forty (40) fluoride samples received on November 25, 1987. The samples have been described, as received, along with the data.

<u>Description</u>	<u>Lab No.:</u>	<u>Fluoride (mg/kg)</u>
BGA-1223-1	94118-19	ND
BGA-1223-2	94118-20	270
BGA-1223-2	94118-21	ND
BGA-1223-4	94118-22	260
BGA-1223-5	94118-23	ND
BGA-1223-6	94118-24	ND
317-6331-1	94119-1	ND
317-6331-2	94119-2	ND
317-6331-3	94119-3	140
317-6331-4	94119-4	160
317-6331-5	94119-5	220
317-6331-6	94119-6	140
^{3/2} 417 -0745-1	94119-7	160
417 -0745-2	94119-8	170
417 -0745-3	94119-9	130
317-1397-1	94119-10	160
317-1397-3	94119-12	170
BGA-2323-1	94118-1	ND
BGA-2323-2	94118-2	340
BGA-2323-3	94118-3	ND
BGA-2323-4	94118-4	ND
BGA-2323-5	94118-5	170
BGA-2323-6	94118-6	180

FGL ENVIRONMENTAL, INC.

Paul Brett

Paul Brett
Environmental Chemist

John Quinn
John Quinn, Ph.D.
Environmental Chemist

PB/JQ:me1

<u>Description</u>	<u>Lab No.:</u>	<u>Fluoride (mg/kg)</u>
BGA-2822-1	94118-7	420
BGA-2822-2	94118-8	180
BGA-2822-3	94118-9	130
BGA-2822-4	94118-10	160
BGA-2822-5	94118-11	160
BGA-2822-6	94118-12	110
BGA-0115-1	94118-13	390
BGA-0115-2	94118-14	180
BGA-0115-3	94118-15	380
BGA-0115-4	94118-16	ND
BGA-0115-5	94118-17	160
BGA-0115-6	94118-18	120
317-2092-1	94119-13	176
BA-6125-3	94120-1	ND
BCPR-2138-3	94120-2	180
EFA-3709-5	94120-3	220
342-2045-4	94120-4	ND

* = Not detected at or above 100 mg/kg

FGL ENVIRONMENTAL, INC.

Paul Brett

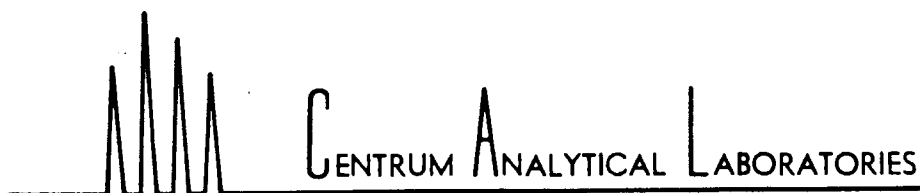
Paul Brett
Environmental Chemist

PB/JQ:me1

John Quinn

John Quinn, Ph.D.
Environmental Chemist

FEB 18 1988



CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

CLIENT: Bermite Division of Whittaker
SITE: Bermite

DATE RECEIVED: 1-6-88
JOB #: 111-001

The enclosed data results sheets are for samples that were analyzed according to EPA Methods 7060 (arsenic), 7080 (barium), 7130 (cadmium), 7190 (chromium), 7420 (lead), 7450 (magnesium), 7471 (mercury), 7741 (selenium), 7760 (silver), 212.3 (boron, colorimetric, curcumin), and 340.2 (fluoride, potentiometric, ion selective electrode). Samples were analyzed with a Perkin-Elmer 1100 atomic absorption spectrophotometer. A Perkin-Elmer MHS-10 hydride system was used for arsenic, selenium, and mercury.

All concentration values have units of ppm. Detection limits (Det Lim) are instrumental detection limits, and also have units of ppm. The concentration was reported if it was greater than or equal to the limit of detection.

Sample numbers ending in "D" indicate duplicate samples.

Sample numbers ending in "S" indicate spiked samples.


ND = Species was analyzed for, but not detected.

NA = Species was not analyzed for.

Respectfully submitted,

Centrum Analytical Laboratories


Reber Brown, Ph.D.
Chemist


Ida Wallace
Laboratory Supervisor

METAL CONCENTRATIONS (ppm) IN SOIL mg/kg
Page 1

Sample No.	Lead	Chromium	Cadmium	Magnesium	Barium
10737-1	8.1	14.19	ND	3810.3	73.0
10737-2	14.0	14.28	ND	3456.3	74.7
10737-3	27.4	13.23	ND	2919.7	68.4
10737-4	11.7	14.49	ND	3014.9	78.3
10737-4D	12.4	13.18	ND	3789.1	74.1
10737-5	21.7	13.46	ND	3039.5	65.1
10737-6	17.3	10.03	ND	3114.2	55.4
10737-7	15.2	11.82	1.91	3888.7	68.6
10737-8	15.8	14.22	ND	2685.6	63.2
10737-9	8.7	22.12	ND	10104.1	203.8
10737-10	4.0	20.2	ND	1817.4	28.3
10615-1	11.8	11.04	ND	3785.5	55.2
10615-2	21.5	8.19	ND	2843.6	64.6
10615-3	74.5	23.85	1.12	3688.5	123.0
10615-4	32.5	15.03	ND	3614.9	77.2
10615-5	17.2	12.47	ND	3096.8	68.8
10615-7	41.1	11.92	ND	3042.8	37.0
10615-9	22.9	17.39	ND	5720.8	77.8
10615-9D	26.3	13.90	ND	5975.2	75.2
10615-10	ND	10.59	ND	3378.1	57.0
6833-1	22.2	16.64	ND	3661.2	88.8
6833-2	17.0	14.91	ND	3662.7	59.6
6833-3	35.2	20.70	0.88	3654.8	83.7
6833-4	60.1	17.69	1.34	3237.7	93.5
6833-5	7.1	13.50	0.36	3516.9	71.0
6833-6	52.2	17.40	1.39	5847.5	100.9
6833-7	45.9	34.06	1.53	4860.3	168.4
6833-8	50.2	38.22	2.32	3166.0	158.3
6833-9	3.9	6.99	1.94	2524.3	ND
6833-10	4.5	12.13	2.70	3056.2	53.9
6125-1	4.4	12.70	ND	3723.2	39.4
6125-2	59.3	15.95	1.82	3783.0	63.8
6125-4	17.7	11.32	0.71	1804.7	28.3
6125-5	170.5	24.16	2.84	3055.1	39.1
6125-6	26.7	13.80	0.89	2048.1	44.5
6125-7	ND	665.63	1.77	2653.7	2251.2
6125-7D	ND	414.29	1.32	2411.2	2012.3
6125-9	ND	14.55	4.85	1675.5	304.2
6125-10	ND	10.64	0.85	3022.6	59.6
2231-1	ND	13.86	1.30	4332.8	69.3
2231-2	ND	10.60	1.18	3926.2	51.0
2231-3	263.4	64.09	12.73	2414.2	215.1



CENTRUM ANALYTICAL LABORATORIES

CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

METAL CONCENTRATIONS (ppm) IN SOIL mg/kg Page 2

Sample No.	Lead	Chromium	Cadmium	Magnesium	Barium
2231-4	21.5	8.17	3.01	2019.8	47.3
2231-5	57.1	43.94	1.32	3251.3	259.2
2231-6	ND	11.10	ND	2177.6	51.2
2231-7	ND	13.02	ND	3384.2	40.9
2231-8	ND	15.72	ND	3863.4	125.8
2231-9	ND	11.30	ND	4640.8	48.4
2231-9D	ND	12.34	ND	4070.7	65.8
2231-10	ND	14.10	ND	2663.8	33.8
4132-2	66.4	19.09	9.54	3112.0	49.8
4132-3	4.4	9.70	ND	4054.6	74.9
4132-4	4.3	7.73	ND	2962.6	42.9
4132-5	4.4	5.34	ND	2580.1	44.5
4132-6	4.3	8.24	ND	5206.1	221.3
4132-7	3.9	10.05	ND	4988.4	305.5
4132-8	8.7	6.93	ND	4202.8	255.6
4132-9	4.4	2.20	ND	2108.0	30.7
4132-10	4.0	2.79	ND	1434.8	31.9
5828-1	ND	14.91	ND	3952.3	55.9
5828-2	ND	12.61	ND	3152.6	54.6
5828-3	13.4	9.80	ND	3654.2	49.0
5828-4	12.9	10.30	ND	3692.6	51.5
5828-5	4.1	9.09	ND	3966.9	41.3
5828-6	7.6	154.82	0.38	2867.0	680.4
5828-7	ND	14.96	ND	5771.7	410.4
5828-8	ND	9.24	ND	3109.2	37.8
5828-9	ND	7.75	ND	3876.0	38.8
5828-9D	ND	7.50	ND	3333.3	33.3
5828-10	ND	9.95	ND	4728.3	41.5
317-1397-4	ND	6.19	ND	1930.1	32.8
317-1397-5	ND	8.40	ND	618.9	53.1
317-1397-6	ND	5.23	ND	3943.7	60.4
317-2092-4	ND	5.74	ND	1805.5	61.6
317-2092-5	ND	6.29	ND	2348.0	54.5
317-2029-6	ND	3.98	ND	1283.2	66.4
317-3369-4	ND	4.35	ND	1434.8	52.2
317-3369-5	ND	21.89	ND	4860.9	59.4
317-3369-6	ND	247.47	ND	1713.8	72.8
317-6089-4	ND	0.77	ND	1348.7	69.4
317-6089-4D	ND	1.18	ND	1686.3	66.7
317-6089-5	ND	6.76	ND	2148.8	31.8
317-6089-6	ND	0.86	ND	2103.9	ND
317-7573-4	ND	7.99	ND	2739.7	76.1
317-7573-5	ND	6.76	ND	2186.9	31.8
317-7573-6	ND	5.52	ND	4078.2	62.9
317-0745-4	ND	0.77	ND	2129.3	46.5

METAL CONCENTRATIONS (ppm) IN SOIL mg/kg
Page 3

Sample No.	Lead	Chromium	Cadmium	Magnesium	Barium
317-0745-5	ND	1.59	ND	2703.8	35.8
317-0745-6	ND	ND	ND	2118.3	40.0
317-3752-4	ND	6.89	ND	2842.4	30.1
317-3752-5	ND	6.26	ND	3208.1	43.0
317-3752-6	ND	2.71	ND	2051.9	38.7
317-3752-6D	ND	2.30	ND	2607.4	38.8
317-6331-4	11.5	0.38	ND	ND	57.4
317-6331-5	9.0	0.90	ND	ND	67.2
BLANKS	0.0	0.02	0.01	0.006	0.1
(ppm of metal	0.0	0.00	0.00	0.000	0.0
in original	0.0	0.00	0.00	0.000	0.0
extract)	0.0	0.00	0.00	0.000	0.2
	0.1	0.00	0.00	0.000	0.0
	0.3	0.00	0.00	0.000	0.1
	0.3	0.00	0.00	0.000	0.1
Detection Limit:	0.1	0.02	0.01	0.002	0.1

ND - Not Detected

METAL CONCENTRATIONS (ppm) IN SOIL mg/kg
Page 1A

Sample No.	Silver	Arsenic	Selenium	Mercury
10737-1	ND	1.6741	0.1419	ND
10737-2	ND	1.9290	ND	ND
10737-3	0.80	1.2591	ND	ND
10737-4	ND	1.7972	0.0685	ND
10737-4D	NA	1.7010	0.1442	NA
10737-5	0.80	1.9931	0.0760	ND
10737-6	ND	1.2699	ND	ND
10737-7	0.41	1.3992	ND	ND
10737-8	ND	0.9084	0.0691	ND
10737-9	ND	1.7910	ND	ND
10737-10	ND	0.5574	0.0707	ND
10737-10D	NA	NA	NA	ND
10615-1	ND	1.6285	ND	ND
10615-2	1.23	1.1891	ND	ND
10615-3	2.34	ND	ND	ND
10615-4	0.40	0.3737	0.1422	ND
10615-4D	1.19	NA	NA	NA
10615-5	ND	0.3957	ND	ND
10615-7	ND	2.6439	ND	ND
10615-7D	NA	NA	NA	ND
10615-9	ND	1.2632	ND	ND
10605-9D	NA	1.0372	0.0658	NA
10615-10	ND	0.1872	ND	ND
6833-1	ND	0.8506	0.0647	ND
6833-2	ND	2.1508	0.0745	ND
6833-3	0.44	2.0255	0.1783	ND
6833-4	1.34	1.6872	ND	ND
6833-5	ND	2.1226	ND	ND
6833-6	7.38	2.7202	ND	ND
6833-6D	NA	NA	NA	ND
6833-7	0.38	1.9154	0.3100	ND
6833-8	0.77	1.5985	ND	ND
6833-9	ND	1.6078	ND	ND
6833-9D	ND	0.7375	ND	NA
6833-10	ND	1.6539	0.1820	ND
6125-1	0.44	2.2142	0.2672	ND
6125-2	1.37	1.8870	ND	ND
6125-2D	NA	NA	NA	ND
6125-4	0.35	1.3022	0.0725	ND
6125-5	2.49	2.4494	ND	ND



CENTRUM ANALYTICAL LABORATORIES

CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

METAL CONCENTRATIONS (ppm) IN SOIL mg/kg Page 2A

<u>Sample No.</u>	<u>Silver</u>	<u>Arsenic</u>	<u>Selenium</u>	<u>Mercury</u>
6125-6	ND	1.0240	ND	ND
6125-7	ND	1.4241	ND	ND
6125-7D	ND	1.2100	0.1776	NA
6125-9	ND	2.0820	ND	ND
6125-10	ND	1.7454	ND	ND
2231-1	0.43	2.6558	0.0888	ND
2231-2	0.39	2.8877	ND	ND
2231-3	5.71	2.4210	ND	ND
2231-4	0.86	1.5814	ND	ND
2231-5	0.88	4.0400	ND	ND
2231-6	ND	1.7677	ND	ND
2231-7	0.37	1.3685	ND	ND
2231-8	ND	1.4465	0.0921	ND
2231-9	0.40	1.2994	0.0827	ND
2231-9D	ND	1.7023	ND	NA
2231-10	ND	0.9725	ND	ND
2231-10D	NA	NA	NA	ND
4132-2	ND	1.3361	0.2531	ND
4132-3	ND	0.6082	ND	ND
4132-4	0.43	1.9751	ND	ND
4132-5	ND	1.6370	0.0912	ND
4132-6	ND	1.9957	ND	ND
4132-7	ND	2.1326	ND	ND
4132-8	0.43	1.7938	0.1755	ND
4132-9	ND	0.6061	ND	ND
4132-9D	NA	NA	NA	ND
4132-10	ND	0.3367	0.0817	ND
4132-10D	ND	0.7331	0.0817	NA
5828-1	0.37	1.5436	ND	ND
5828-2	0.42	1.3535	0.1702	ND
5828-3	ND	1.0250	0.0914	ND
5828-4	0.86	1.7776	0.0880	ND
5828-5	ND	1.9008	ND	ND
5828-6	0.38	1.6437	ND	ND
5828-7	ND	1.8384	ND	ND
5828-8	ND	1.5294	ND	ND
5828-8D	NA	NA	NA	ND
5828-9	ND	1.1391	ND	ND
5828-9D	ND	0.9646	ND	NA
5828-10	ND	1.2239	ND	ND
317-1397-4	0.36	1.3256	ND	ND
317-1397-5	ND	1.1693	0.0973	ND
317-1397-6	ND	1.1972	0.1791	ND

METAL CONCENTRATIONS (ppm) IN SOIL mg/kg
Page 3A

Sample No.	Silver	Arsenic	Selenium	Mercury
317-2092-4	ND	0.9499	0.0903	ND
317-2092-5	1.68	1.1090	ND	ND
317-2029-6	ND	1.0243	ND	ND
317-3369-4	ND	0.7196	ND	ND
317-3369-5	ND	1.4039	0.0816	ND
317-3369-6	ND	0.8505	ND	ND
317-3369-6D	NA	NA	NA	ND
317-6089-4	ND	0.6378	ND	ND
317-6089-4D	ND	1.2961	ND	NA
317-6089-5	ND	0.6586	0.1771	ND
317-6089-6	ND	1.9880	0.0945	ND
317-7573-4	ND	1.0065	0.1693	ND
317-7573-5	0.40	1.0517	0.0875	ND
317-7573-6	ND	1.2368	0.0935	ND
317-0745-4	ND	1.1518	ND	ND
317-0745-5	ND	1.4473	0.0875	ND
317-0745-6	ND	1.4548	0.0879	ND
317-3752-4	0.43	1.1391	ND	ND
317-3752-5	0.39	1.5532	ND	ND
317-3752-6	0.39	1.2795	0.0852	ND
317-6331-4	0.00	0.7594	ND	ND
317-6331-5	0.45	0.5939	0.1995	ND
BLANKS	0.00	0.009	0.005	0.002
(ppm of metal	0.01	0.010	0.004	0.002
in original	0.01	0.009	0.004	0.001
extract for	0.00	0.010	0.005	0.002
silver,	0.01	0.008	0.006	0.002
absorbance	0.00	0.007	0.005	0.001
units for	0.01	0.008	0.005	0.001
As, Se, Hg)	0.01	0.014	0.004	0.001
	0.00	0.007	0.005	0.001
	0.00	0.012	0.004	
Detection Limits:	0.01	0.009	0.004	0.004

NA = Not Analyzed
ND = Not Detected



CENTRUM ANALYTICAL LABORATORIES

CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

METAL CONCENTRATIONS (ppm) IN SOIL mg/kg QC DATA REPORT Page 1B

SELENIUM (ppm)

Sample No.	5828-9	317-6089-4	6833-9	317-1397-6	317-0745-4
Dup 1 (ng)	ND	ND	ND	.443	ND
Dup 2 (ng)	ND	ND	ND	ND	ND
Amount Spiked					
Added (ng)	5.0	5.0	5.0	5.0	5.0
Theoretical					
Amount (ng)	5.0	5.0	5.0	5.43	5.0
Experimental					
Amount (ng)	4.43	4.43	4.06	4.43	4.61
% Recovery	88.5	88.5	81.2	81.4	92.2

ARSENIC (ppm)

Sample No.	10615-9	10737-4	5828-9	317-6089-4	317-1397-6
Dup 1 (ng)	2.76	4.59	2.64	1.65	2.98
Dup 2 (ng)	2.76	4.13	2.31	3.31	
Amount Spiked					
Added (ng)	2.5	2.5	2.5	2.5	2.5
Theoretical					
Amount (ng)	5.26	6.86	4.98	4.98	5.48
Experimental					
Amount (ng)	5.51	7.35	4.96	4.63	5.62
% Recovery	105	107	99.6	93.0	102

MERCURY (ppm)

Sample No.	10737-10	6833-6	10615-7	5828-8	317-3752-6
Dup 1 (ng)	ND	ND	ND	ND	ND
Dup 2 (ng)	ND	ND	ND	ND	ND
Amount Spiked					
Added (ng)	20	20	20	20	20
Theoretical					
Amount (ng)	20	20	20	20	20
Experimental					
Amount (ng)	20.1	21.8	20.9	21.9	22.4
% Recovery	101	109	104	110	112



CENTRUM ANALYTICAL LABORATORIES

CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

METAL CONCENTRATIONS (ppm) IN SOIL mg/kg QC DATA REPORT Page 2B

SILVER (ppm)

Sample No.	10737-5	10615-4	2231-4	5828-9	317-0745-4
Dup 1 (ng)	ND	0.01	.02	ND	ND
Dup 2 (ng)	.03	.03	.02	ND	ND
Amount Spiked					
Added (ng)	1.0	1.0	1.0	1.0	1.0
Theoretical					
Amount (ng)	1.02	1.02	1.02	1.00	1.00
Experimental					
Amount (ng)	0.89	1.12	1.03	1.01	1.10
% Recovery	87.2	110	101	99	110

LEAD (ppm)

Sample No.	10737-4	6125-7	2231-9	5828-9	317-6089-4
Dup 1 (ng)	0.3	ND	ND	ND	ND
Dup 2 (ng)	0.3	ND	ND	ND	ND
Amount Spiked					
Added (ng)	5.0	5.0	5.0	5.0	5.0
Theoretical					
Amount (ng)	5.3	5.0	5.0	5.0	5.0
Experimental					
Amount (ng)	5.2	5.1	5.0	4.5	4.4
% Recovery	98.1	102	100	90	88

CADMIUM (ppm)

Sample No.	10615-9	6125-7	4132-10	5828-9	317-6089-4
Dup 1 (ng)	ND	.01	ND	ND	ND
Dup 2 (ng)	ND	.03	ND	ND	ND
Amount Spiked					
Added (ng)	5.0	.05	.05	.05	.05
Theoretical					
Amount (ng)	5.0	.07	.05	.05	.05
Experimental					
Amount (ng)	5.4	.08	.04	.04	.04
% Recovery	108	114	80	80	80



CENTRUM ANALYTICAL LABORATORIES

CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

METAL CONCENTRATIONS (ppm) IN SOIL mg/kg QC DATA REPORT Page 3B

MAGNESIUM (ppm)

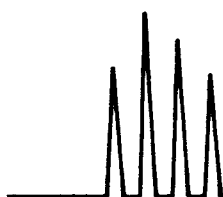
Sample No.	107317-4	6125-7	5828-9	2231-9	317-6089-4
Dup 1 (ng)	98	60	80	115	35
Dup 2 (ng)	83	55	90	99	43
Amount Spiked					
Added (ng)	5.0	5.0	5.0	5.0	5.0
Theoretical					
Amount (ng)	95.5	62.5	90	112	44
Experimental					
Amount (ng)	111	63	97	99	43
% Recovery	116	101	108	88	98

CHROMIUM (ppm)

Sample No.	10737-4	6833-9	2231-9	5828-9	317-6089-4
Dup 1 (ng)	.39	0.18	0.28	0.18	0.02
Dup 2 (ng)	.34	0.17	0.30	0.18	0.03
Amount Spiked					
Added (ng)	5.00	2.00	2.00	2.00	2.00
Theoretical					
Amount (ng)	5.36	2.18	2.29	2.18	2.02
Experimental					
Amount (ng)	4.80	2.02	2.17	1.87	1.69
% Recovery	89.6	92.7	94.8	85.8	83.7

BARIUM (ppm)

Sample No.	10737-4	6833-9	4132-10	5828-9	317-6089-4
Dup 1 (ng)	2.1	ND	0.9	1.0	1.9
Dup 2 (ng)	1.9	ND	1.0	0.9	1.8
Amount Spiked					
Added (ng)	5.0	5.0	5.0	5.0	5.0
Theoretical					
Amount (ng)	7.0	5.0	5.95	5.95	6.85
Experimental					
Amount (ng)	5.8	4.5	5.10	5.6	5.6
% Recovery	83	90	85.7	94.1	81.8



CENTRUM ANALYTICAL LABORATORIES

CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

METAL CONCENTRATIONS (ppm) IN SOIL mg/kg QC DATA REPORT Page 4B

BORON (ppm)

Sample No.	10737-4	6125-4	2231-2	4132-2
Dup 1 (ng)	.206	.082	.030	.082
Dup 2 (ng)	.198	.091	.069	.055
Amount Spiked				
Added (ng)	.5	.500	.50	.50
Theoretical				
Amount (ng)	.702	.586	.550	.568
Experimental				
Amount (ng)	.605	.550	.512	.553
% Recovery	86.2	93.8	93.1	97.4

Sample Number	pH	Boron (ppm)	Fluoride (ppm)	Sample Number	pH	Boron (ppm)	Fluoride (ppm)	Sample Number	pH
10737-1	8.27	NA	NA	2231-1	6.74	0.41	ND	317-1397-4	7.28
10737-2	7.50	1.51	ND	2231-2	6.76	0.50	ND	317-1397-5	7.26
10737-3	8.03	3.46	ND	2231-3	8.01	3.00	ND	317-1396-6	6.66
10737-4	7.66	2.02	ND	2231-4	8.69	1.32	ND	317-2092-4	5.95
10737-5	7.78	0.82	ND	2231-5	8.41	2.61	ND	317-2092-5	6.28
10737-6	4.62	0.69	ND	2231-6	6.45	0.50	ND	317-2029-6	5.83
10737-7	7.94	1.16	ND	2231-7	7.01	ND	ND	317-3369-4	5.32
10737-8	8.28	21.30	ND	2231-8	6.99	ND	ND	317-3369-5	5.18
10737-9	8.78	30.00	4.6	2231-9	6.83	0.28	ND	317-3369-6	6.57
10737-10	7.40	2.06	ND	2231-10	6.33	ND	ND	317-6089-4	5.31
10615-1	6.98	4.15	ND	4132-2	7.04	0.68	ND	317-6089-5	5.42
10615-2	7.73	7.24	ND	4132-3	7.24	1.92	ND	317-6089-6	6.80
10615-3	7.32	5.72	ND	4132-4	6.45	0.82	ND	317-7573-4	5.99
10615-4	7.08	2.34	ND	4132-5	6.63	0.88	ND	317-7573-5	6.16
10615-5	7.08	1.65	ND	4132-6	7.44	ND	ND	317-7573-6	6.20
10615-7	5.93	0.82	ND	4132-7	7.41	0.82	ND	317-0745-4	5.66
10615-9	6.97	1.04	ND	4132-8	6.62	0.25	ND	317-0745-5	5.32
10615-10	4.72	1.57	ND	4132-9	6.51	0.01	ND	317-0745-6	5.35
6833-1	7.34	1.46	ND	4132-10	6.83	0.16	ND	317-3752-4	6.66
6833-2	7.80	0.82	ND	5825-1	7.42	0.55	ND	317-3752-5	6.93
6833-3	8.05	1.32	ND	5828-2	6.98	0.88	ND	317-3752-6	5.68
6833-4	7.05	0.50	ND	5828-3	7.64	1.51	ND	317-6331-4	10.15
6833-5	7.14	1.65	ND	5828-4	7.61	ND	ND	317-6331-5	10.05
6833-6	6.93	1.38	ND	5828-5	7.14	1.48	ND		
6833-7	7.94	17.90	ND	5828-6	7.67	20.40	ND		
6833-8	8.07	9.35	ND	5828-7	7.41	6.08	1.4		
6833-9	7.04	3.30	ND	5828-8	7.06	3.05	ND		
6833-10	6.88	3.40	ND	5828-9	6.32	3.14	ND		
6127-1	6.84	0.77	ND	5828-10	7.44	1.87	ND		
6125-2	6.72	0.60	ND						
6125-4	6.88	0.86	ND						
6125-5	7.36	0.82	ND						
6125-6	7.15	58.80	ND						
6125-7	8.30	118.00	ND						
6125-9	6.52	24.80	ND						
6125-10	7.12	24.10	ND						

NA = Not analyzed

ND = Not Detected

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

RECEIVED BY
WENCK / SERVICES INC.

DEC 28 1987

December 24, 1987
Lab No.: 94118, 94119 and 94120

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

RE: SOIL ANALYSES - pH

Gentlemen:

Attached are the results of analyses performed on your fifty-five (55) soil samples received on November 25, 1987. The samples have been described, as received, along with the data.

If you have any questions, please call or write.

Very truly yours,
FRUIT GROWERS LABORATORY, INC.



John Quinn, Ph.D
Environmental Chemist

JQ:mel

TEST RESULTS

<u>Lab No.</u>	<u>Description</u>	<u>pH</u>
94119-1	317-6331-1	7.9
94119-2	317-6331-2	6.6
94119-3	317-6331-3	7.1
94119-4	317-6331-4	6.7
94119-5	317-6331-5	7.0
94119-6	317-6331-6	7.0
94119-7	317-0745-1	6.6
94119-8	317-0745-2	6.7
94119-9	317-0745-3	6.7
94119-10	317-1397-1	8.8
94119-11	317-1397-2	8.0
94119-12	317-1397-3	7.5
94119-13	317-2092-1	7.0
94119-14	317-2092-2	7.2
94119-15	317-2092-3	7.4
94119-16	317-3369-1	7.1
94119-17	317-3369-2	6.6
94119-18	317-3369-3	6.9
94119-19	317-3752-1	6.9
94119-20	317-3752-2	7.1
94119-21	317-3752-3	6.8
94119-22	317-6089-1	7.0
94119-23	317-6089-2	6.8
94119-24	317-6089-3	7.4
94119-25	317-7573-1	7.6
94119-26	317-7573-2	7.2
94119-27	317-7573-3	7.3

FGL ENVIRONMENTAL, INC.

By John Quinn
John Quinn, Ph.D.
Environmental Chemist

JQ:me1

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/28/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

DATE ANALYZED: 12/11-12/23/87

REPORT OF ANALYSIS FOR MERCURY IN SOIL (EPA METHOD 7471)

<u>Sample I.D.</u>	<u>Lab No.</u>	<u>Mercury (mg/kg)</u>
BGA-2323-1	94118-1	*0.1
BGA-2323-2	94118-2	*0.1
BGA-2323-3	94118-3	*0.1
BGA-2323-4	94118-4	*0.1
BGA-2323-5	94118-5	*0.1
BGA-2323-6	94118-6	*0.1
BGA-2822-1	94118-7	*0.1
BGA-2822-2	94118-8	*0.1
BGA-2822-3	94118-9	*0.1
BGA-2822-4	94118-10	*0.1
BGA-2822-5	94118-11	*0.1
BGA-2822-6	94118-12	*0.1
BGA-0115-1	94118-13	*0.1
BGA-0115-2	94118-14	*0.1
BGA-0115-3	94118-15	*0.1
BGA-0115-4	94118-16	*0.1
BGA-0115-5	94118-17	*0.1
BGA-0115-6	94118-18	*0.1
BGA-1223-1	94118-19	*0.1
BGA-1223-2	94118-20	*0.1
BGA-1223-3	94118-21	*0.1
BGA-1223-4	94118-22	*0.1
BGA-1223-5	94118-23	*0.1
BGA-1223-6	94118-24	*0.1
317-6331-1	94119-1	*0.1
317-6331-2	94119-2	*0.1
317-6331-3	94119-3	*0.1
317-6331-4	94119-4	*0.1
317-6331-5	94119-5	*0.1
317-6331-6	94119-6	*0.1

<u>Sample I.D.</u>	<u>Lab No.</u>	<u>Mercury (mg/kg)</u>
317-0745-1	94119-7	*0.1
317-0745-2	94119-8	*0.1
317-0745-3	94119-9	*0.1
317-1397-1	94119-10	*0.1
317-1397-2	94119-11	*0.1
317-1397-3	94119-12	*0.1
317-2092-1	94119-13	*0.1
317-2092-2	94119-14	*0.1
317-2092-3	94119-15	*0.1
317-3369-1	94119-16	*0.1
317-3369-2	94119-17	*0.1
317-3369-3	94119-18	*0.1
317-3752-1	94119-19	*0.1
317-3752-2	94119-20	*0.1
317-3752-3	94119-21	*0.1
317-6089-1	94119-22	*0.1
317-6089-2	94119-23	*0.1
317-6089-3	94119-24	*0.1
317-7573-1	94119-25	*0.1
317-7573-2	94119-26	*0.1
317-7573-3	94119-27	*0.1
BA-6125-3	94120-1	*0.1
BCPR-2138-3	94120-2	*0.1
EFA-3709-5	94120-3	*0.1
342-2045-4	94120-4	*0.1

Very truly yours,
FGL Environmental

Paul Bredt
Paul Bredt

PB/CG:me1

Charles Green
Charles Green, Ph.D.
Lab Director

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

February 15, 1988

Bermite Division of Whittaker
22115 W. Soledad Canyon Road
Saugus, CA 91350

Gentlemen:

RE: COPPER ANALYSES

Presented below are the results of the analyses performed on your samples received November 20, 1987. The samples have been described, along with the data.

DATA

Date Sampled: 11/20/87
Date Analyzed: 2/12/88

<u>Lab. No.</u>	<u>Sample I.D.</u>	<u>Copper (mg/kg)</u>	<u>Detection Limit (mg/kg)</u>
94119-16	317-3369-1	ND	10
94119-17	317-3369-2	ND	10
94119-18	317-3369-3	ND	10

ND = Not detected at or above the
concentration of the detection limit.

Very truly yours,
FGL ENVIRONMENTAL, INC.

Paul Bredt
Paul Bredt
Environmental Chemist

PB/JQ:cem

John
John
Envir

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

February 15, 1988

Bermite Division of Whittaker
22115 W. Soledad Canyon Road
Saugus, CA 91350

Gentlemen:

RE: COPPER ANALYSES

Presented below are the results of the analyses performed on your three (3) samples received November 20, 1987. The samples have been described, as received, along with the data.

DATA

Date Sampled: 11/20/87

Date Analyzed: 2/12/88

<u>Lab. No.</u>	<u>Sample I.D.</u>	<u>Copper (mg/kg)</u>	<u>Detection Limit (mg/kg)</u>
94119-19	317-3752-1	ND	10
94119-20	317-3752-2	ND	10
94119-21	317-3752-3	ND	10

ND = Not detected at or above the
concentration of the detection limit.

Very truly yours,
FGL ENVIRONMENTAL, INC.

Paul Brett
Paul Brett
Environmental Chemist

PB/JQ:cm

John Quinn
John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

February 15, 1988

Bermite Division of Whittaker
22115 W. Soledad Canyon Road
Saugus, CA 91350

Gentlemen:

RE: COPPER ANALYSES

Presented below are the results of the anal
samples received November 20, 1987. The sa
received, along with the data.

DATA

Date Sampled: 11/20/87

Date Analyzed: 2/12/88

<u>Lab. No.</u>	<u>Sample I.D.</u>	<u>Copp (mg/</u>
94119-7	317-0795-1	N
94119-8	317-0795-2	N
94119-9	317-0795-3	N

ND = Not detected at or above the
concentration of the detection limit.

Very truly yours,
FGL ENVIRONMENTAL, INC.

Paul Brett
Paul Brett
Environmental Chemist

PB/JQ:cem

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

February 15, 1988

Bermite Division of Whittaker
22115 W. Soledad Canyon Road
Saugus, CA 91350

Gentlemen:

RE: COPPER ANALYSES

Presented below are the results of the analyses performed on your three (3) samples received November 20, 1987. The samples have been described, as received, along with the data.

DATA

Date Sampled: 11/20/87
Date Analyzed: 2/12/88

<u>Lab. No.</u>	<u>Sample I.D.</u>	<u>Copper (mg/kg)</u>	<u>Detection Limit (mg/kg)</u>
94119-22	317-6089-1	ND	10
94119-23	317-6089-2	ND	10
94119-24	317-6089-3	ND	10

ND = Not detected at or above the
concentration of the detection limit.

Very truly yours,
FGL ENVIRONMENTAL, INC.

Paul Bredt
Paul Bredt
Environmental Chemist

PB/JQ:cm

John Quinn
John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

February 15, 1988

Bermite Division of Whittaker
22115 W. Soledad Canyon Road
Saugus, CA 91350

Gentlemen:

RE: COPPER ANALYSES

Presented below are the results of the analyses performed on your three (3) samples received November 20, 1987. The samples have been described, as received, along with the data.

DATA

Date Sampled: 11/20/87
Date Analyzed: 2/12/88

<u>Lab. No.</u>	<u>Sample I.D.</u>	<u>Copper (mg/kg)</u>	<u>Detection Limit (mg/kg)</u>
94119-13	317-2092-1	ND	10
94119-14	317-2092-2	ND	10
94119-15	317-2092-3	20	10

ND = Not detected at or above the
concentration of the detection limit.

Very truly yours,
FGL ENVIRONMENTAL, INC.

Paul Bredt
Paul Bredt
Environmental Chemist

PB/JQ:cem

John F. Quinn
John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

February 15, 1988

Bermite Division of Whittaker
22115 W. Soledad Canyon Road
Saugus, CA 91350

Gentlemen:

RE: COPPER ANALYSES

Presented below are the results of the analyses performed on your three (3) samples received November 20, 1987. The samples have been described, as received, along with the data.

DATA

Date Sampled: 11/20/87
Date Analyzed: 2/12/88

<u>Lab. No.</u>	<u>Sample I.D.</u>	<u>Copper (mg/kg)</u>	<u>Detection Limit (mg/kg)</u>
94119-10	317-1397-1	18	10
94119-11	317-1397-2	ND	10
94119-12	317-1397-3	ND	10

ND = Not detected at or above the
concentration of the detection limit.

Very truly yours,
FGL ENVIRONMENTAL, INC.

Paul Brett

Paul Brett
Environmental Chemist

PB/JQ:cm

John Quinn

John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

February 15, 1988

Bermite Division of Whittaker
22115 W. Soledad Canyon Road
Saugus, CA 91350

Gentlemen:

RE: COPPER ANALYSES

Presented below are the results of the analyses performed on your six (6) samples received November 20, 1987. The samples have been described, as received, along with the data.

DATA

Date Sampled: 11/20/87
Date Analyzed: 2/12/88

<u>Lab. No.</u>	<u>Sample I.D.</u>	<u>Copper (mg/kg)</u>	<u>Detection Limit (mg/kg)</u>
94119-1	317-6331-1	ND	10
94119-2	317-6331-2	ND	10
94119-3	317-6331-3	ND	10
94119-4	317-6331-4	ND	10
94119-5	317-6331-5	ND	10
94119-6	317-6331-6	11	10

ND = Not detected at or above the
concentration of the detection limit.

Very truly yours,
FGL ENVIRONMENTAL, INC.

Paul Brett
Paul Brett
Environmental Chemist

PB/JQ:cem

John Quinn
John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

February 15, 1988

Bermite Division of Whittaker
22115 W. Soledad Canyon Road
Saugus, CA 91350

Gentlemen:

RE: COPPER ANALYSES

Presented below are the results of the analyses performed on your three (3) samples received November 20, 1987. The samples have been described, as received, along with the data.

DATA

Date Sampled: 11/20/87
Date Analyzed: 2/12/88

<u>Lab. No.</u>	<u>Sample I.D.</u>	<u>Copper (mg/kg)</u>	<u>Detection Limit (mg/kg)</u>
94119-25	317-7573-1	ND	10
94119-26	317-7573-2	ND	10
94119-27	317-7573-3	ND	10

ND = Not detected at or above the
concentration of the detection limit.

Very truly yours,
FGL ENVIRONMENTAL, INC.

Paul Brett
Paul Brett
Environmental Chemist

PB/JQ:cem

John Quinn
John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94119-16

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-3369-1

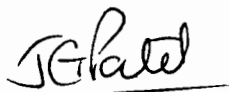
REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

Compound	ug/kg	Detection	Compound	ug/kg	Detection
		Limit ug/kg			Limit ug/kg
Acetone	ND	* 10	Methyl Methacrylate	ND	* 5.0
Benzene	ND	* 5.0	Styrene	ND	* 5.0
Butyl Acetate	ND	* 5.0	Tetrachloroethene	ND	* 5.0
Carbon Disulfide	ND	* 5.0	1,1,1-Trichloroethane	ND	* 5.0
Chloroform	ND	* 5.0	Trichloroethene	ND	* 5.0
Decane	ND	* 5.0	Toluene	ND	* 5.0
Ethyl Benzene	ND	* 5.0	Xylenes	ND	* 5.0
Methylene Chloride	ND	* 5.0	Undecane	ND	* 5.0
Methyl Ethyl Ketone	ND	*10.0			

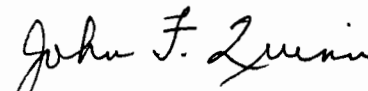
* = less than

ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist



John F. Quinn, Ph.D.
Environmental Chemist

JGP/JFQ:me1

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94119-17

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-3369-2

REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

Compound	ug/kg	Detection Limit ug/kg
Acetone	ND	* 10
Benzene	ND	* 5.0
Butyl Acetate	ND	* 5.0
Carbon Disulfide	ND	* 5.0
Chloroform	ND	* 5.0
Decane	ND	* 5.0
Ethyl Benzene	ND	* 5.0
Methylene Chloride	ND	* 5.0
Methyl Ethyl Ketone	ND	*10.0

Compound	ug/kg	Detection Limit ug/kg
Methyl Methacrylate	ND	* 5.0
Styrene	ND	* 5.0
Tetrachloroethene	ND	* 5.0
1,1,1-Trichloroethane	ND	* 5.0
Trichloroethene	ND	* 5.0
Toluene	ND	* 5.0
Xylenes	ND	* 5.0
Undecane	ND	* 5.0

* = less than
ND = Not Detected



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1

Respectfully submitted,



John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94119-18

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-3369-3

REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

Compound	ug/kg	Detection
		Limit ug/kg
Acetone	ND	* 10
Benzene	ND	* 5.0
Butyl Acetate	ND	* 5.0
Carbon Disulfide	ND	* 5.0
Chloroform	ND	* 5.0
Decane	ND	* 5.0
Ethyl Benzene	ND	* 5.0
Methylene Chloride	ND	* 5.0
Methyl Ethyl Ketone	ND	* 10.0

Compound	ug/kg	Detection
		Limit ug/kg
Methyl Methacrylate	ND	* 5.0
Styrene	ND	* 5.0
Tetrachloroethene	ND	* 5.0
1,1,1-Trichloroethane	ND	* 5.0
Trichloroethene	ND	* 5.0
Toluene	ND	* 5.0
Xylenes	ND	* 5.0
Undecane	ND	* 5.0

* = less than
ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist



John F. Quinn, Ph.D.
Environmental Chemist

JGP/JFQ:me1

CLIENT : Bermite Division of Whittaker
 SITE : Bermite
 SAMPLE : 317-3369-4
 MATRIX : Soil

DATE RECEIVED: 01/06/88
 DATE ANALYZED: 01/18/88
 SAMPLE AMOUNT: 1.0 gms
 STANDARD ID : VOA33

EPA METHOD 8240 (624)

CAS #	COMPOUND:	CONC: UG/KG (ppb)	DETECTION LIMIT:
74-87-3	CHLOROMETHANE	ND	30
74-83-9	BROMOMETHANE	ND	30
75-01-4	VINYL CHLORIDE	ND	30
75-00-3	CHLOROETHANE	ND	30
75-09-2	METHYLENE CHLORIDE	ND	50
67-64-1	ACETONE	ND	50
75-15-0	CARBON DISULFIDE	ND	5
75-35-4	1,1-DICHLOROETHENE	ND	5
75-34-3	1,1-DICHLOROETHANE	ND	5
156-60-5	TRANS-1,2-DICHLOROETHENE	ND	5
67-66-3	CHLOROFORM	ND	5
107-06-2	1,2-DICHLOROETHANE	ND	5
78-93-3	2-BUTANONE	ND	50
71-55-6	1,1,1-TRICHLOROETHANE	ND	5
16-23-5	CARBON TETRACHLORIDE	ND	5
108-05-4	VINYL ACETATE	ND	30
75-27-4	BROMODICHLOROMETHANE	ND	5
78-87-5	1,2-DICHLOROPROPANE	ND	5
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ND	5
79-01-6	TRICHLOROETHENE	ND	5
124-48-1	DIBROMOCHLOROMETHANE	ND	5
79-00-5	1,1,2-TRICHLOROETHANE	ND	5
71-43-2	BENZENE	ND	5
10061-01-5	CIS-1,3-DICHLOROPROPENE	ND	5
110-75-8	2-CHLOROETHYL VINYL ETHER	ND	50
75-25-2	BROMOFORM	ND	5
119-78-6	2-HEXANONE	ND	30
108-10-1	4-METHYL-2-PENTANONE	ND	30
127-18-4	TETRACHLOROETHENE	ND	5
79-34-5	1,1,2,2 TETRACHLOROETHANE	ND	5
108-88-3	TOLUENE	ND	5
108-90-7	CHLOROBENZENE	ND	5
100-41-4	ETHYLBENZENE	ND	5
75-69-4	TRICHLOROFLUOROMETHANE	ND	5
100-42-5	STYRENE	ND	5
95-47-6	TOTAL XYLENES	ND	5
95-50-1	1,2-DICHLOROBENZENE	ND	5
541-73-1	1,3-DICHLOROBENZENE	ND	5
106-46-7	1,4-DICHLOROBENZENE	ND	5

CLIENT : Bermite Division of Whittaker
 SITE : Bermite
 SAMPLE : 317-3369-5
 MATRIX : Soil

DATE RECEIVED: 01/06/88
 DATE ANALYZED: 01/15/88
 SAMPLE AMOUNT: 1.0 gms
 STANDARD ID : VOA31

EPA METHOD 8240 (624)

CAS #	COMPOUND:	CONC: UG/KG (ppb)	DETECTION LIMIT:
74-87-3	CHLOROMETHANE	ND	30
74-83-9	BROMOMETHANE	ND	30
75-01-4	VINYL CHLORIDE	ND	30
75-00-3	CHLOROETHANE	ND	30
75-09-2	METHYLENE CHLORIDE	ND	50
67-64-1	ACETONE	160	50
75-15-0	CARBON DISULFIDE	ND	5
75-35-4	1,1-DICHLOROETHENE	ND	5
75-34-3	1,1-DICHLOROETHANE	ND	5
156-60-5	TRANS-1,2-DICHLOROETHENE	ND	5
67-66-3	CHLOROFORM	ND	5
107-06-2	1,2-DICHLOROETHANE	ND	5
78-93-3	2-BUTANONE	ND	50
71-55-6	1,1,1-TRICHLOROETHANE	ND	5
16-23-5	CARBON TETRACHLORIDE	ND	5
108-05-4	VINYL ACETATE	ND	30
75-27-4	BROMODICHLOROMETHANE	ND	5
78-87-5	1,2-DICHLOROPROPANE	ND	5
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ND	5
79-01-6	TRICHLOROETHENE	ND	5
124-48-1	DIBROMOCHLOROMETHANE	ND	5
79-00-5	1,1,2-TRICHLOROETHANE	ND	5
71-43-2	BENZENE	ND	5
10061-01-5	CIS-1,3-DICHLOROPROPENE	ND	5
110-75-8	2-CHLOROETHYL VINYL ETHER	ND	50
75-25-2	BROMOFORM	ND	5
119-78-6	2-HEXANONE	ND	30
108-10-1	4-METHYL-2-PENTANONE	ND	30
127-18-4	TETRACHLOROETHENE	ND	5
79-34-5	1,1,2,2 TETRACHLOROETHANE	ND	5
108-88-3	TOLUENE	ND	5
108-90-7	CHLOROBENZENE	ND	5
100-41-4	ETHYLBENZENE	ND	5
75-69-4	TRICHLOROFLUOROMETHANE	ND	5
100-42-5	STYRENE	ND	5
95-47-6	TOTAL XYLENES	ND	5
95-50-1	1,2-DICHLOROBENZENE	ND	5
541-73-1	1,3-DICHLOROBENZENE	ND	5
106-46-7	1,4-DICHLOROBENZENE	ND	5

CLIENT : Bermite Division of Whittaker
 SITE : Bermite
 SAMPLE : 317-3369-6
 MATRIX : Soil

DATE RECIEVED: 01/06/88
 DATE ANALYZED: 01/15/88
 SAMPLE AMOUNT: 1.0 gms
 STANDARD ID : VOA31

EPA METHOD 8240 (624)

CAS #	COMPOUND:	CONC: UG/KG (ppb)	DETECTION LIMIT:
74-87-3	CHLOROMETHANE	ND	30
74-83-9	BROMOMETHANE	ND	30
75-01-4	VINYL CHLORIDE	ND	30
75-00-3	CHLOROETHANE	ND	30
75-09-2	METHYLENE CHLORIDE	ND	50
67-64-1	ACETONE	150	50
75-15-0	CARBON DISULFIDE	ND	5
75-35-4	1,1-DICHLOROETHENE	ND	5
75-34-3	1,1-DICHLOROETHANE	ND	5
156-60-5	TRANS-1,2-DICHLOROETHENE	ND	5
67-66-3	CHLOROFORM	ND	5
107-06-2	1,2-DICHLOROETHANE	ND	5
78-93-3	2-BUTANONE	ND	50
71-55-6	1,1,1-TRICHLOROETHANE	ND	5
16-23-5	CARBON TETRACHLORIDE	ND	5
108-05-4	VINYL ACETATE	ND	30
75-27-4	BROMODICHLOROMETHANE	ND	5
78-87-5	1,2-DICHLOROPROPANE	ND	5
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ND	5
79-01-6	TRICHLOROETHENE	6	5
124-48-1	DIBROMOCHLOROMETHANE	ND	5
79-00-5	1,1,2-TRICHLOROETHANE	ND	5
71-43-2	BENZENE	ND	5
10061-01-5	CIS-1,3-DICHLOROPROPENE	ND	5
110-75-8	2-CHLOROETHYL VINYL ETHER	ND	50
75-25-2	BROMOFORM	ND	5
119-78-6	2-HEXANONE	ND	30
108-10-1	4-METHYL-2-PENTANONE	ND	30
127-18-4	TETRACHLOROETHENE	ND	5
79-34-5	1,1,2,2 TETRACHLOROETHANE	ND	5
108-88-3	TOLUENE	ND	5
108-90-7	CHLOROBENZENE	ND	5
100-41-4	ETHYLBENZENE	ND	5
75-69-4	TRICHLOROFLUOROMETHANE	ND	5
100-42-5	STYRENE	ND	5
95-47-6	TOTAL XYLENES	ND	5
95-50-1	1,2-DICHLOROBENZENE	ND	5
541-73-1	1,3-DICHLOROBENZENE	ND	5
106-46-7	1,4-DICHLOROBENZENE	ND	5

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94119-19

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-3752-1

REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

Compound	ug/kg	Detection Limit ug/kg
Acetone	ND	* 10
Benzene	ND	* 5.0
Butyl Acetate	ND	* 5.0
Carbon Disulfide	ND	* 5.0
Chloroform	ND	* 5.0
Decane	ND	* 5.0
Ethyl Benzene	ND	* 5.0
Methylene Chloride	ND	* 5.0
Methyl Ethyl Ketone	ND	*10.0

Compound	ug/kg	Detection Limit ug/kg
Methyl Methacrylate	ND	* 5.0
Styrene	ND	* 5.0
Tetrachloroethene	ND	* 5.0
1,1,1-Trichloroethane	ND	* 5.0
Trichloroethene	ND	* 5.0
Toluene	ND	* 5.0
Xylenes	ND	* 5.0
Undecane	ND	* 5.0

* = less than
ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist



John F. Quinn, Ph.D.
Environmental Chemist

JGP/JFQ:me1

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94119-20

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-3752-2

REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

Compound	Detection		Compound	Detection	
	ug/kg	Limit ug/kg		ug/kg	Limit ug/kg
Acetone	ND	* 10	Methyl Methacrylate	ND	* 5.0
Benzene	ND	* 5.0	Styrene	ND	* 5.0
Butyl Acetate	ND	* 5.0	Tetrachloroethene	ND	* 5.0
Carbon Disulfide	ND	* 5.0	1,1,1-Trichloroethane	ND	* 5.0
Chloroform	ND	* 5.0	Trichloroethene	ND	* 5.0
Decane	ND	* 5.0	Toluene	ND	* 5.0
Ethyl Benzene	ND	* 5.0	Xylenes	ND	* 5.0
Methylene Chloride	ND	* 5.0	Undecane	ND	* 5.0
Methyl Ethyl Ketone	ND	*10.0			

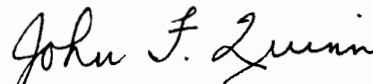
* = less than

ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist



John F. Quinn, Ph.D.
Environmental Chemist

JGP/JFQ:me1

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94119-21

DATE ANALYZED: 12/02/87

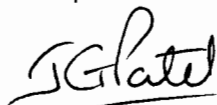
SAMPLE I.D.: 317-3752-3

REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

Compound	ug/kg	Detection Limit ug/kg
Acetone	ND	* 10
Benzene	ND	* 5.0
Butyl Acetate	ND	* 5.0
Carbon Disulfide	ND	* 5.0
Chloroform	ND	* 5.0
Decane	ND	* 5.0
Ethyl Benzene	ND	* 5.0
Methylene Chloride	ND	* 5.0
Methyl Ethyl Ketone	ND	* 10.0

Compound	ug/kg	Detection Limit ug/kg
Methyl Methacrylate	ND	* 5.0
Styrene	ND	* 5.0
Tetrachloroethene	ND	* 5.0
1,1,1-Trichloroethane	ND	* 5.0
Trichloroethene	ND	* 5.0
Toluene	ND	* 5.0
Xylenes	ND	* 5.0
Undecane	ND	* 5.0

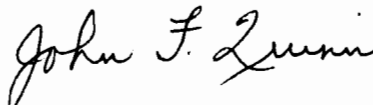
* = less than
ND = Not Detected



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1

Respectfully submitted,



John F. Quinn, Ph.D.
Environmental Chemist

CLIENT : Bermite Division of Whittaker	DATE RECEIVED: 01/06/88
SITE : Bermite	DATE ANALYZED: 01/17/88
SAMPLE : 317-3752-4	SAMPLE AMOUNT: 1.0 gms
MATRIX : Soil	STANDARD ID : VOA32

EPA METHOD 8240 (624)

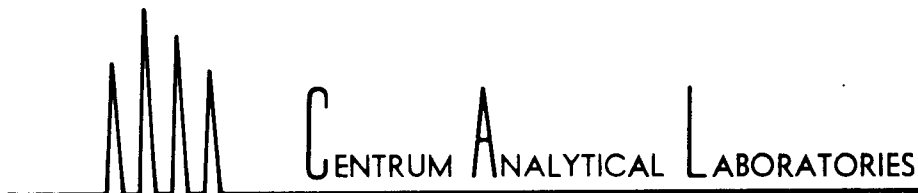
CAS #	COMPOUND:	CONC: UG/KG (ppb)	DETECTION LIMIT:
74-87-3	CHLOROMETHANE	ND	30
74-83-9	BROMOMETHANE	ND	30
75-01-4	VINYL CHLORIDE	ND	30
75-00-3	CHLOROETHANE	ND	30
75-09-2	METHYLENE CHLORIDE	ND	50
67-64-1	ACETONE	ND	50
75-15-0	CARBON DISULFIDE	ND	5
75-35-4	1,1-DICHLOROETHENE	ND	5
75-34-3	1,1-DICHLOROETHANE	ND	5
156-60-5	TRANS-1,2-DICHLOROETHENE	ND	5
67-66-3	CHLOROFORM	ND	5
107-06-2	1,2-DICHLOROETHANE	ND	5
78-93-3	2-BUTANONE	ND	50
71-55-6	1,1,1-TRICHLOROETHANE	ND	5
16-23-5	CARBON TETRACHLORIDE	ND	5
108-05-4	VINYL ACETATE	ND	30
75-27-4	BROMODICHLOROMETHANE	ND	5
78-87-5	1,2-DICHLOROPROPANE	ND	5
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ND	5
79-01-6	TRICHLOROETHENE	54	5
124-48-1	DIBROMOCHLOROMETHANE	ND	5
79-00-5	1,1,2-TRICHLOROETHANE	ND	5
71-43-2	BENZENE	ND	5
10061-01-5	CIS-1,3-DICHLOROPROPENE	ND	5
110-75-8	2-CHLOROETHYL VINYL ETHER	ND	50
75-25-2	BROMOFORM	ND	5
119-78-6	2-HEXANONE	ND	30
108-10-1	4-METHYL-2-PENTANONE	ND	30
127-18-4	TETRACHLOROETHENE	10	5
79-34-5	1,1,2,2 TETRACHLOROETHANE	ND	5
108-88-3	TOLUENE	ND	5
108-90-7	CHLOROBENZENE	ND	5
100-41-4	ETHYLBENZENE	ND	5
75-69-4	TRICHLOROFLUOROMETHANE	ND	5
100-42-5	STYRENE	ND	5
95-47-6	TOTAL XYLENES	ND	5
95-50-1	1,2-DICHLOROBENZENE	ND	5
541-73-1	1,3-DICHLOROBENZENE	ND	5
106-46-7	1,4-DICHLOROBENZENE	ND	5

CLIENT : Bermite Division of Whittaker
 SITE : Bermite
 SAMPLE : 317-3752-5
 MATRIX : Soil

DATE RECEIVED: 01/06/88
 DATE ANALYZED: 01/17/88
 SAMPLE AMOUNT: 1.0 gms
 STANDARD ID : VOA32

EPA METHOD 8240 (624)

CAS #	COMPOUND:	CONC: UG/KG (ppb)	DETECTION LIMIT:
74-87-3	CHLOROMETHANE	ND	30
74-83-9	BROMOMETHANE	ND	30
75-01-4	VINYL CHLORIDE	ND	30
75-00-3	CHLOROETHANE	ND	30
75-09-2	METHYLENE CHLORIDE	ND	50
67-64-1	ACETONE	ND	50
75-15-0	CARBON DISULFIDE	ND	5
75-35-4	1,1-DICHLOROETHENE	ND	5
75-34-3	1,1-DICHLOROETHANE	ND	5
156-60-5	TRANS-1,2-DICHLOROETHENE	ND	5
67-66-3	CHLOROFORM	ND	5
107-06-2	1,2-DICHLOROETHANE	ND	5
78-93-3	2-BUTANONE	ND	50
71-55-6	1,1,1-TRICHLOROETHANE	ND	5
16-23-5	CARBON TETRACHLORIDE	ND	5
108-05-4	VINYL ACETATE	ND	30
75-27-4	BROMODICHLOROMETHANE	ND	5
78-87-5	1,2-DICHLOROPROPANE	ND	5
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ND	5
79-01-6	TRICHLOROETHENE	43	5
124-48-1	DIBROMOCHLOROMETHANE	ND	5
79-00-5	1,1,2-TRICHLOROETHANE	ND	5
71-43-2	BENZENE	ND	5
10061-01-5	CIS-1,3-DICHLOROPROPENE	ND	5
110-75-8	2-CHLOROETHYL VINYL ETHER	ND	50
75-25-2	BROMOFORM	ND	5
119-78-6	2-HEXANONE	ND	30
108-10-1	4-METHYL-2-PENTANONE	ND	30
127-18-4	TETRACHLOROETHENE	28	5
79-34-5	1,1,2,2 TETRACHLOROETHANE	ND	5
108-88-3	TOLUENE	ND	5
108-90-7	CHLOROBENZENE	ND	5
100-41-4	ETHYLBENZENE	ND	5
75-69-4	TRICHLOROFLUOROMETHANE	ND	5
100-42-5	STYRENE	ND	5
95-47-6	TOTAL XYLENES	ND	5
95-50-1	1,2-DICHLOROBENZENE	ND	5
541-73-1	1,3-DICHLOROBENZENE	ND	5
106-46-7	1,4-DICHLOROBENZENE	ND	5



CENTRUM ANALYTICAL LABORATORIES

CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

CLIENT : Bermite Division of Whittaker
SITE : Bermite
SAMPLE : 317-3752-6
MATRIX : Soil

DATE RECIEVED: 01/06/88
DATE ANALYZED: 01/15/88
SAMPLE AMOUNT: 1.0 gms
STANDARD ID : VOA31

EPA METHOD 8240 (624)

CAS #	COMPOUND:	CONC: UG/KG (ppb)	DETECTION LIMIT:
74-87-3	CHLOROMETHANE	ND	30
74-83-9	BROMOMETHANE	ND	30
75-01-4	VINYL CHLORIDE	ND	30
75-00-3	CHLOROETHANE	ND	30
75-09-2	METHYLENE CHLORIDE	ND	50
67-64-1	ACETONE	ND	50
75-15-0	CARBON DISULFIDE	ND	5
75-35-4	1,1-DICHLOROETHENE	ND	5
75-34-3	1,1-DICHLOROETHANE	ND	5
156-60-5	TRANS-1,2-DICHLOROETHENE	11	5
67-66-3	CHLOROFORM	ND	5
107-06-2	1,2-DICHLOROETHANE	ND	5
78-93-3	2-BUTANONE	ND	50
71-55-6	1,1,1-TRICHLOROETHANE	16	5
16-23-5	CARBON TETRACHLORIDE	ND	5
108-05-4	VINYL ACETATE	ND	30
75-27-4	BROMODICHLOROMETHANE	ND	5
78-87-5	1,2-DICHLOROPROPANE	ND	5
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ND	5
79-01-6	TRICHLOROETHENE	1500	5
124-48-1	DIBROMOCHLOROMETHANE	ND	5
79-00-5	1,1,2-TRICHLOROETHANE	ND	5
71-43-2	BENZENE	ND	5
10061-01-5	CIS-1,3-DICHLOROPROPENE	ND	5
110-75-8	2-CHLOROETHYL VINYL ETHER	ND	50
75-25-2	BROMOFORM	ND	5
119-78-6	2-HEXANONE	ND	30
108-10-1	4-METHYL-2-PENTANONE	ND	30
127-18-4	TETRACHLOROETHENE	640	5
79-34-5	1,1,2,2 TETRACHLOROETHANE	ND	5
108-88-3	TOLUENE	ND	5
108-90-7	CHLOROBENZENE	ND	5
100-41-4	ETHYLBENZENE	ND	5
75-69-4	TRICHLOROFLUOROMETHANE	ND	5
100-42-5	STYRENE	ND	5
95-47-6	TOTAL XYLENES	ND	5
95-50-1	1,2-DICHLOROBENZENE	ND	5
541-73-1	1,3-DICHLOROBENZENE	ND	5
106-46-7	1,4-DICHLOROBENZENE	ND	5

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94119-7

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-0745-1

REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

Compound	Detection		Compound	Detection	
	ug/kg	Limit ug/kg		ug/kg	Limit ug/kg
Acetone	ND	* 10	Methyl Methacrylate	ND	* 5.0
Benzene	ND	* 5.0	Styrene	ND	* 5.0
Butyl Acetate	ND	* 5.0	Tetrachloroethene	ND	* 5.0
Carbon Disulfide	ND	* 5.0	1,1,1-Trichloroethane	ND	* 5.0
Chloroform *	ND	* 5.0	Trichloroethene	ND	* 5.0
Decane	ND	* 5.0	Toluene	ND	* 5.0
Ethyl Benzene	ND	* 5.0	Xylenes	ND	* 5.0
Methylene Chloride	ND	* 5.0	Undecane	ND	* 5.0
Methyl Ethyl Ketone	ND	*10.0			

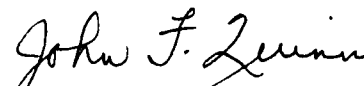
* = less than

ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist



John F. Quinn, Ph.D.
Environmental Chemist

JGP/JFQ:me1

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94119-8

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-0745-2

REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

Compound	Detection		Compound	Detection	
	ug/kg	Limit ug/kg		ug/kg	Limit ug/kg
Acetone	ND	* 10	Methyl Methacrylate	ND	* 5.0
Benzene	ND	* 5.0	Styrene	ND	* 5.0
Butyl Acetate	ND	* 5.0	Tetrachloroethene	5.7	* 5.0
Carbon Disulfide	ND	* 5.0	1,1,1-Trichloroethane	ND	* 5.0
Chloroform	ND	* 5.0	Trichloroethene	ND	* 5.0
Decane	ND	* 5.0	Toluene	ND	* 5.0
Ethyl Benzene	ND	* 5.0	Xylenes	ND	* 5.0
Methylene Chloride	ND	* 5.0	Undecane	ND	* 5.0
Methyl Ethyl Ketone	ND	*10.0			

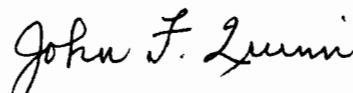
* = less than

ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist



John F. Quinn, Ph.D.
Environmental Chemist

JGP/JFQ:me1

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94119-9

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-0745-3

REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

Compound	ug/kg	Detection Limit ug/kg
Acetone	ND	* 10
Benzene	ND	* 5.0
Butyl Acetate	ND	* 5.0
Carbon Disulfide	ND	* 5.0
Chloroform	ND	* 5.0
Decane	ND	* 5.0
Ethyl Benzene	ND	* 5.0
Methylene Chloride	ND	* 5.0
Methyl Ethyl Ketone	ND	*10.0

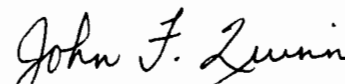
Compound	ug/kg	Detection Limit ug/kg
Methyl Methacrylate	ND	* 5.0
Styrene	ND	* 5.0
Tetrachloroethene	8.3	* 5.0
1,1,1-Trichloroethane	ND	* 5.0
Trichloroethene	ND	* 5.0
Toluene	ND	* 5.0
Xylenes	ND	* 5.0
Undecane	ND	* 5.0

* = less than
ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist



John F. Quinn, Ph.D.
Environmental Chemist

JGP/JFQ:me1



CENTRUM ANALYTICAL LABORATORIES

CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

CLIENT : Bermite Division of Whittaker
SITE : Bermite
SAMPLE : 317-0745-4
MATRIX : Soil

DATE RECEIVED: 01/06/88
DATE ANALYZED: 01/15/88
SAMPLE AMOUNT: 1.0 gms
STANDARD ID : VOA31

EPA METHOD 8240 (624)

CAS #	COMPOUND:	CONC: UG/KG (ppb)	DETECTION LIMIT:
74-87-3	CHLOROMETHANE	ND	30
74-83-9	BROMOMETHANE	ND	30
75-01-4	VINYL CHLORIDE	ND	30
75-00-3	CHLOROETHANE	ND	30
75-09-2	METHYLENE CHLORIDE	ND	50
67-64-1	ACETONE	ND	50
75-15-0	CARBON DISULFIDE	ND	5
75-35-4	1,1-DICHLOROETHENE	ND	5
75-34-3	1,1-DICHLOROETHANE	ND	5
156-60-5	TRANS-1,2-DICHLOROETHENE	ND	5
67-66-3	CHLOROFORM	ND	5
107-06-2	1,2-DICHLOROETHANE	ND	5
78-93-3	2-BUTANONE	ND	50
71-55-6	1,1,1-TRICHLOROETHANE	ND	5
16-23-5	CARBON TETRACHLORIDE	ND	5
108-05-4	VINYL ACETATE	ND	30
75-27-4	BROMODICHLOROMETHANE	ND	5
78-87-5	1,2-DICHLOROPROPANE	ND	5
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ND	5
79-01-6	TRICHLOROETHENE	23	5
124-48-1	DIBROMOCHLOROMETHANE	ND	5
79-00-5	1,1,2-TRICHLOROETHANE	ND	5
71-43-2	BENZENE	ND	5
10061-01-5	CIS-1,3-DICHLOROPROPENE	ND	5
110-75-8	2-CHLOROETHYL VINYL ETHER	ND	50
75-25-2	BROMOFORM	ND	5
119-78-6	2-HEXANONE	ND	30
108-10-1	4-METHYL-2-PENTANONE	ND	30
127-18-4	TETRACHLOROETHENE	ND	5
79-34-5	1,1,2,2 TETRACHLOROETHANE	ND	5
108-88-3	TOLUENE	ND	5
108-90-7	CHLOROBENZENE	ND	5
100-41-4	ETHYLBENZENE	ND	5
75-69-4	TRICHLOROFLUOROMETHANE	ND	5
100-42-5	STYRENE	ND	5
95-47-6	TOTAL XYLENES	ND	5
95-50-1	1,2-DICHLOROBENZENE	ND	5
541-73-1	1,3-DICHLOROBENZENE	ND	5
106-46-7	1,4-DICHLOROBENZENE	ND	5

CLIENT : Bermite Division of Whittaker
 SITE : Bermite
 SAMPLE : 317-0745-5
 MATRIX : Soil

DATE RECIEVED: 01/06/88
 DATE ANALYZED: 01/19/88
 SAMPLE AMOUNT: 1.0 gms
 STANDARD ID : VOA34

EPA METHOD 8240 (624)

CAS #	COMPOUND:	CONC: UG/KG (ppb)	DETECTION LIMIT:
74-87-3	CHLOROMETHANE	ND	30
74-83-9	BROMOMETHANE	ND	30
75-01-4	VINYL CHLORIDE	ND	30
75-00-3	CHLOROETHANE	ND	30
75-09-2	METHYLENE CHLORIDE	ND	50
67-64-1	ACETONE	ND	50
75-15-0	CARBON DISULFIDE	ND	5
75-35-4	1,1-DICHLOROETHENE	ND	5
75-34-3	1,1-DICHLOROETHANE	ND	5
156-60-5	TRANS-1,2-DICHLOROETHENE	ND	5
67-66-3	CHLOROFORM	ND	5
107-06-2	1,2-DICHLOROETHANE	ND	5
78-93-3	2-BUTANONE	ND	50
71-55-6	1,1,1-TRICHLOROETHANE	ND	5
16-23-5	CARBON TETRACHLORIDE	ND	5
108-05-4	VINYL ACETATE	ND	30
75-27-4	BROMODICHLOROMETHANE	ND	5
78-87-5	1,2-DICHLOROPROPANE	ND	5
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ND	5
79-01-6	TRICHLOROETHENE	29	5
124-48-1	DIBROMOCHLOROMETHANE	ND	5
79-00-5	1,1,2-TRICHLOROETHANE	ND	5
71-43-2	BENZENE	ND	5
10061-01-5	CIS-1,3-DICHLOROPROPENE	ND	5
110-75-8	2-CHLOROETHYL VINYL ETHER	ND	50
75-25-2	BROMOFORM	ND	5
119-78-6	2-HEXANONE	ND	30
108-10-1	4-METHYL-2-PENTANONE	ND	30
127-18-4	TETRACHLOROETHENE	ND	5
79-34-5	1,1,2,2 TETRACHLOROETHANE	ND	5
108-88-3	TOLUENE	ND	5
108-90-7	CHLOROBENZENE	ND	5
100-41-4	ETHYLBENZENE	ND	5
75-69-4	TRICHLOROFLUOROMETHANE	ND	5
100-42-5	STYRENE	ND	5
95-47-6	TOTAL XYLENES	ND	5
95-50-1	1,2-DICHLOROBENZENE	ND	5
541-73-1	1,3-DICHLOROBENZENE	ND	5
106-46-7	1,4-DICHLOROBENZENE	ND	5

CLIENT : Bermite Division of Whittaker
 SITE : Bermite
 SAMPLE : 317-0745-6
 MATRIX : Soil

DATE RECIEVED: 01/06/88
 DATE ANALYZED: 01/15/88
 SAMPLE AMOUNT: 1.0 gms
 STANDARD ID : VOA31

EPA METHOD 8240 (624)

CAS #	COMPOUND:	CONC: UG/KG (ppb)	DETECTION LIMIT:
74-87-3	CHLOROMETHANE	ND	30
74-83-9	BROMOMETHANE	ND	30
75-01-4	VINYL CHLORIDE	ND	30
75-00-3	CHLOROETHANE	ND	30
75-09-2	METHYLENE CHLORIDE	ND	50
67-64-1	ACETONE	130	50
75-15-0	CARBON DISULFIDE	ND	5
75-35-4	1,1-DICHLOROETHENE	ND	5
75-34-3	1,1-DICHLOROETHANE	ND	5
156-60-5	TRANS-1,2-DICHLOROETHENE	ND	5
67-66-3	CHLOROFORM	ND	5
107-06-2	1,2-DICHLOROETHANE	ND	5
78-93-3	2-BUTANONE	ND	50
71-55-6	1,1,1-TRICHLOROETHANE	ND	5
16-23-5	CARBON TETRACHLORIDE	ND	5
108-05-4	VINYL ACETATE	ND	30
75-27-4	BROMODICHLOROMETHANE	ND	5
78-87-5	1,2-DICHLOROPROPANE	ND	5
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ND	5
79-01-6	TRICHLOROETHENE	10	5
124-48-1	DIBROMOCHLOROMETHANE	ND	5
79-00-5	1,1,2-TRICHLOROETHANE	ND	5
71-43-2	BENZENE	ND	5
10061-01-5	CIS-1,3-DICHLOROPROPENE	ND	5
110-75-8	2-CHLOROETHYL VINYL ETHER	ND	50
75-25-2	BROMOFORM	ND	5
119-78-6	2-HEXANONE	ND	30
108-10-1	4-METHYL-2-PENTANONE	ND	30
127-18-4	TETRACHLOROETHENE	ND	5
79-34-5	1,1,2,2 TETRACHLOROETHANE	ND	5
108-88-3	TOLUENE	ND	5
108-90-7	CHLOROBENZENE	ND	5
100-41-4	ETHYLBENZENE	ND	5
75-69-4	TRICHLOROFLUOROMETHANE	ND	5
100-42-5	STYRENE	ND	5
95-47-6	TOTAL XYLENES	ND	5
95-50-1	1,2-DICHLOROBENZENE	ND	5
541-73-1	1,3-DICHLOROBENZENE	ND	5
106-46-7	1,4-DICHLOROBENZENE	ND	5

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94119-22

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-6089-1

REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

Compound	ug/kg	Detection Limit ug/kg
Acetone	ND	* 10
Benzene	ND	* 5.0
Butyl Acetate	ND	* 5.0
Carbon Disulfide	ND	* 5.0
Chloroform	ND	* 5.0
Decane	ND	* 5.0
Ethyl Benzene	ND	* 5.0
Methylene Chloride	ND	* 5.0
Methyl Ethyl Ketone	ND	*10.0

Compound	ug/kg	Detection Limit ug/kg
Methyl Methacrylate	ND	* 5.0
Styrene	ND	* 5.0
Tetrachloroethene	ND	* 5.0
1,1,1-Trichloroethane	ND	* 5.0
Trichloroethene	ND	* 5.0
Toluene	ND	* 5.0
Xylenes	ND	* 5.0
Undecane	ND	* 5.0

* = less than

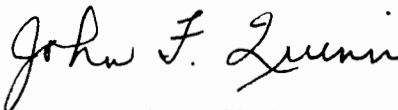
ND = Not Detected



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1

Respectfully submitted,



John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94119-23

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-6089-2

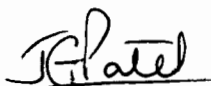
REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

Compound	Detection		Compound	Detection	
	ug/kg	Limit ug/kg		ug/kg	Limit ug/kg
Acetone	ND	* 10	Methyl Methacrylate	ND	* 5.0
Benzene	ND	* 5.0	Styrene	ND	* 5.0
Butyl Acetate	ND	* 5.0	Tetrachloroethene	ND	* 5.0
Carbon Disulfide	ND	* 5.0	1,1,1-Trichloroethane	ND	* 5.0
Chloroform	ND	* 5.0	Trichloroethene	ND	* 5.0
Decane	ND	* 5.0	Toluene	ND	* 5.0
Ethyl Benzene	ND	* 5.0	Xylenes	ND	* 5.0
Methylene Chloride	ND	* 5.0	Undecane	ND	* 5.0
Methyl Ethyl Ketone	ND	*10.0			

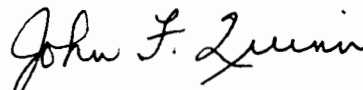
* = less than

ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist



John F. Quinn, Ph.D.
Environmental Chemist

JGP/JFQ:me1

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94119-24

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-6089-3

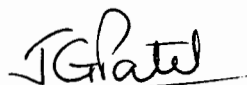
REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

Compound	ug/kg	Detection Limit	Compound	ug/kg	Detection Limit
		ug/kg			ug/kg
Acetone	ND	* 10	Methyl Methacrylate	ND	* 5.0
Benzene	ND	* 5.0	Styrene	ND	* 5.0
Butyl Acetate	ND	* 5.0	Tetrachloroethene	ND	* 5.0
Carbon Disulfide	ND	* 5.0	1,1,1-Trichloroethane	ND	* 5.0
Chloroform	ND	* 5.0	Trichloroethene	ND	* 5.0
Decane	ND	* 5.0	Toluene	ND	* 5.0
Ethyl Benzene	ND	* 5.0	Xylenes	ND	* 5.0
Methylene Chloride	ND	* 5.0	Undecane	ND	* 5.0
Methyl Ethyl Ketone	ND	*10.0			

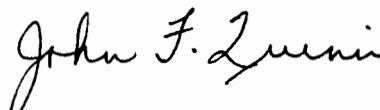
* = less than

ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist



John F. Quinn, Ph.D.
Environmental Chemist

JGP/JFQ:me1

CLIENT : Bermite Division of Whittaker
 SITE : Bermite
 SAMPLE : 317-6089-4
 MATRIX : Soil

DATE RECEIVED: 01/06/88
 DATE ANALYZED: 01/18/88
 SAMPLE AMOUNT: 1.0 gms
 STANDARD ID : VOA33

EPA METHOD 8240 (624)

CAS #	COMPOUND:	CONC: UG/KG (ppb)	DETECTION LIMIT:
74-87-3	CHLOROMETHANE	ND	30
74-83-9	BROMOMETHANE	ND	30
75-01-4	VINYL CHLORIDE	ND	30
75-00-3	CHLOROETHANE	ND	30
75-09-2	METHYLENE CHLORIDE	ND	50
67-64-1	ACETONE	ND	50
75-15-0	CARBON DISULFIDE	ND	5
75-35-4	1,1-DICHLOROETHENE	ND	5
75-34-3	1,1-DICHLOROETHANE	ND	5
156-60-5	TRANS-1,2-DICHLOROETHENE	ND	5
67-66-3	CHLOROFORM	ND	5
107-06-2	1,2-DICHLOROETHANE	ND	5
78-93-3	2-BUTANONE	ND	50
71-55-6	1,1,1-TRICHLOROETHANE	ND	5
16-23-5	CARBON TETRACHLORIDE	ND	5
108-05-4	VINYL ACETATE	ND	30
75-27-4	BROMODICHLOROMETHANE	ND	5
78-87-5	1,2-DICHLOROPROPANE	ND	5
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ND	5
79-01-6	TRICHLOROETHENE	ND	5
124-48-1	DIBROMOCHLOROMETHANE	ND	5
79-00-5	1,1,2-TRICHLOROETHANE	ND	5
71-43-2	BENZENE	ND	5
10061-01-5	CIS-1,3-DICHLOROPROPENE	ND	5
110-75-8	2-CHLOROETHYL VINYL ETHER	ND	50
75-25-2	BROMOFORM	ND	5
119-78-6	2-HEXANONE	ND	30
108-10-1	4-METHYL-2-PENTANONE	ND	30
127-18-4	TETRACHLOROETHENE	ND	5
79-34-5	1,1,2,2 TETRACHLOROETHANE	ND	5
108-88-3	TOLUENE	ND	5
108-90-7	CHLOROBENZENE	ND	5
100-41-4	ETHYLBENZENE	ND	5
75-69-4	TRICHLOROFLUOROMETHANE	ND	5
100-42-5	STYRENE	ND	5
95-47-6	TOTAL XYLENES	ND	5
95-50-1	1,2-DICHLOROBENZENE	ND	5
541-73-1	1,3-DICHLOROBENZENE	ND	5
106-46-7	1,4-DICHLOROBENZENE	ND	5



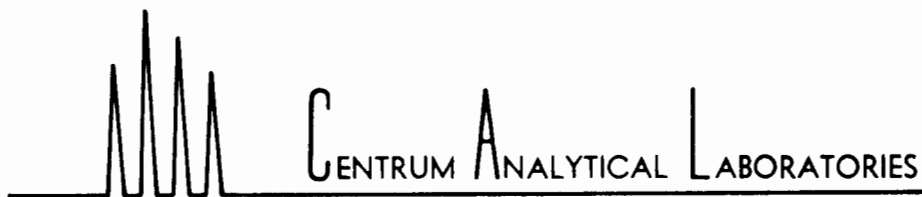
CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

CLIENT : Bermite Division of Whittaker
SITE : Bermite
SAMPLE : 317-6089-5
MATRIX : Soil

DATE RECEIVED: 01/06/88
DATE ANALYZED: 01/15/88
SAMPLE AMOUNT: 1.0 gms
STANDARD ID : VOA31

EPA METHOD 8240 (624)

CAS #	COMPOUND:	CONC: UG/KG (ppb)	DETECTION LIMIT:
74-87-3	CHLOROMETHANE	ND	30
74-83-9	BROMOMETHANE	ND	30
75-01-4	VINYL CHLORIDE	ND	30
75-00-3	CHLOROETHANE	ND	30
75-09-2	METHYLENE CHLORIDE	ND	50
67-64-1	ACETONE	ND	50
75-15-0	CARBON DISULFIDE	ND	5
75-35-4	1,1-DICHLOROETHENE	ND	5
75-34-3	1,1-DICHLOROETHANE	ND	5
156-60-5	TRANS-1,2-DICHLOROETHENE	ND	5
67-66-3	CHLOROFORM	ND	5
107-06-2	1,2-DICHLOROETHANE	ND	5
78-93-3	2-BUTANONE	ND	50
71-55-6	1,1,1-TRICHLOROETHANE	ND	5
16-23-5	CARBON TETRACHLORIDE	ND	5
108-05-4	VINYL ACETATE	ND	30
75-27-4	BROMODICHLOROMETHANE	ND	5
78-87-5	1,2-DICHLOROPROPANE	ND	5
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ND	5
79-01-6	TRICHLOROETHENE	ND	5
124-48-1	DIBROMOCHLOROMETHANE	ND	5
79-00-5	1,1,2-TRICHLOROETHANE	ND	5
71-43-2	BENZENE	ND	5
10061-01-5	CIS-1,3-DICHLOROPROPENE	ND	5
110-75-8	2-CHLOROETHYL VINYL ETHER	ND	50
75-25-2	BROMOFORM	ND	5
119-78-6	2-HEXANONE	ND	30
108-10-1	4-METHYL-2-PENTANONE	ND	30
127-18-4	TETRACHLOROETHENE	ND	5
79-34-5	1,1,2,2 TETRACHLOROETHANE	ND	5
108-88-3	TOLUENE	ND	5
108-90-7	CHLOROBENZENE	ND	5
100-41-4	ETHYLBENZENE	ND	5
75-69-4	TRICHLOROFLUOROMETHANE	ND	5
100-42-5	STYRENE	ND	5
95-47-6	TOTAL XYLENES	ND	5
95-50-1	1,2-DICHLOROBENZENE	ND	5
541-73-1	1,3-DICHLOROBENZENE	ND	5
106-46-7	1,4-DICHLOROBENZENE	ND	5



CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

CLIENT : Bermite Division of Whittaker
 SITE : Bermite
 SAMPLE : 317-6089-6
 MATRIX : Soil

DATE RECEIVED: 01/06/88
 DATE ANALYZED: 01/19/88
 SAMPLE AMOUNT: 1.0 gms
 STANDARD ID : VOA34

EPA METHOD 8240 (624)

CAS #	COMPOUND:	CONC: UG/KG (ppb)	DETECTION LIMIT:
74-87-3	CHLOROMETHANE	ND	30
74-83-9	BROMOMETHANE	ND	30
75-01-4	VINYL CHLORIDE	ND	30
75-00-3	CHLOROETHANE	ND	30
75-09-2	METHYLENE CHLORIDE	ND	50
67-64-1	ACETONE	ND	50
75-15-0	CARBON DISULFIDE	ND	5
75-35-4	1,1-DICHLOROETHENE	ND	5
75-34-3	1,1-DICHLOROETHANE	ND	5
156-60-5	TRANS-1,2-DICHLOROETHENE	ND	5
67-66-3	CHLOROFORM	ND	5
107-06-2	1,2-DICHLOROETHANE	ND	5
78-93-3	2-BUTANONE	ND	50
71-55-6	1,1,1-TRICHLOROETHANE	ND	5
16-23-5	CARBON TETRACHLORIDE	ND	5
108-05-4	VINYL ACETATE	ND	30
75-27-4	BROMODICHLOROMETHANE	ND	5
78-87-5	1,2-DICHLOROPROPANE	ND	5
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ND	5
79-01-6	TRICHLOROETHENE	ND	5
124-48-1	DIBROMOCHLOROMETHANE	ND	5
79-00-5	1,1,2-TRICHLOROETHANE	ND	5
71-43-2	BENZENE	ND	5
10061-01-5	CIS-1,3-DICHLOROPROPENE	ND	5
110-75-8	2-CHLOROETHYL VINYL ETHER	ND	50
75-25-2	BROMOFORM	ND	5
119-78-6	2-HEXANONE	ND	30
108-10-1	4-METHYL-2-PENTANONE	ND	30
127-18-4	TETRACHLOROETHENE	ND	5
79-34-5	1,1,2,2 TETRACHLOROETHANE	ND	5
108-88-3	TOLUENE	ND	5
108-90-7	CHLOROBENZENE	ND	5
100-41-4	ETHYLBENZENE	ND	5
75-69-4	TRICHLOROFLUOROMETHANE	ND	5
100-42-5	STYRENE	ND	5
95-47-6	TOTAL XYLENES	ND	5
95-50-1	1,2-DICHLOROBENZENE	ND	5
541-73-1	1,3-DICHLOROBENZENE	ND	5
106-46-7	1,4-DICHLOROBENZENE	ND	5

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94119-13

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-2092-1

REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

Compound	ug/kg	Detection Limit ug/kg	Compound	ug/kg	Detection Limit ug/kg
Acetone	ND	* 10	Methyl Methacrylate	ND	* 5.0
Benzene	ND	* 5.0	Styrene	ND	* 5.0
Butyl Acetate	ND	* 5.0	Tetrachloroethene	ND	* 5.0
Carbon Disulfide	ND	* 5.0	1,1,1-Trichloroethane	ND	* 5.0
Chloroform	ND	* 5.0	Trichloroethene	ND	* 5.0
Decane	ND	* 5.0	Toluene	ND	* 5.0
Ethyl Benzene	ND	* 5.0	Xylenes	ND	* 5.0
Methylene Chloride	ND	* 5.0	Undecane	ND	* 5.0
Methyl Ethyl Ketone	ND	*10.0			

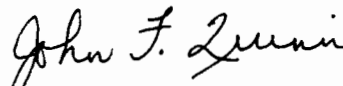
* = less than

ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist



John F. Quinn, Ph.D.
Environmental Chemist

JGP/JFQ:me1

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94119-14

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-2092-2

REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

Compound	Detection	
	ug/kg	Limit ug/kg
Acetone	ND	* 10
Benzene	ND	* 5.0
Butyl Acetate	ND	* 5.0
Carbon Disulfide	ND	* 5.0
Chloroform	ND	* 5.0
Decane	ND	* 5.0
Ethyl Benzene	ND	* 5.0
Methylene Chloride	ND	* 5.0
Methyl Ethyl Ketone	ND	*10.0

Compound	Detection	
	ug/kg	Limit ug/kg
Methyl Methacrylate	ND	* 5.0
Styrene	ND	* 5.0
Tetrachloroethene	ND	* 5.0
1,1,1-Trichloroethane	ND	* 5.0
Trichloroethene	ND	* 5.0
Toluene	ND	* 5.0
Xylenes	ND	* 5.0
Undecane	ND	* 5.0

* = less than
ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist



John F. Quinn, Ph.D.
Environmental Chemist

JGP/JFQ:me1

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94119-15

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-2092-3

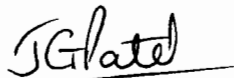
REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

Compound	ug/kg	Detection Limit ug/kg
Acetone	ND	* 10
Benzene	ND	* 5.0
Butyl Acetate	ND	* 5.0
Carbon Disulfide	ND	* 5.0
Chloroform	ND	* 5.0
Decane	ND	* 5.0
Ethyl Benzene	ND	* 5.0
Methylene Chloride	ND	* 5.0
Methyl Ethyl Ketone	ND	* 10.0

Compound	ug/kg	Detection Limit ug/kg
Methyl Methacrylate	ND	* 5.0
Styrene	ND	* 5.0
Tetrachloroethene	ND	* 5.0
1,1,1-Trichloroethane	ND	* 5.0
Trichloroethene	ND	* 5.0
Toluene	ND	* 5.0
Xylenes	ND	* 5.0
Undecane	ND	* 5.0

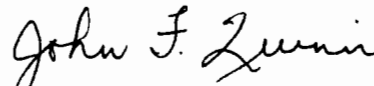
* = less than
ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1



John F. Quinn, Ph.D.
Environmental Chemist



CENTRUM ANALYTICAL LABORATORIES

CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

CLIENT : Bermite Division of Whittaker
 SITE : Bermite
 SAMPLE : 317-2092-4
 MATRIX : Soil

DATE RECEIVED: 01/06/88
 DATE ANALYZED: 01/19/88
 SAMPLE AMOUNT: 1.0 gms
 STANDARD ID : VOA34

EPA METHOD 8240 (624)

CAS #	COMPOUND:	CONC: UG/KG (ppb)	DETECTION LIMIT:
74-87-3	CHLOROMETHANE	ND	30
74-83-9	BROMOMETHANE	ND	30
75-01-4	VINYL CHLORIDE	ND	30
75-00-3	CHLOROETHANE	ND	30
75-09-2	METHYLENE CHLORIDE	ND	50
67-64-1	ACETONE	ND	50
75-15-0	CARBON DISULFIDE	15	5
75-35-4	1,1-DICHLOROETHENE	ND	5
75-34-3	1,1-DICHLOROETHANE	ND	5
156-60-5	TRANS-1,2-DICHLOROETHENE	ND	5
67-66-3	CHLOROFORM	ND	5
107-06-2	1,2-DICHLOROETHANE	ND	5
78-93-3	2-BUTANONE	ND	50
71-55-6	1,1,1-TRICHLOROETHANE	ND	5
16-23-5	CARBON TETRACHLORIDE	ND	5
108-05-4	VINYL ACETATE	ND	30
75-27-4	BROMODICHLOROMETHANE	ND	5
78-87-5	1,2-DICHLOROPROPANE	ND	5
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ND	5
79-01-6	TRICHLOROETHENE	5	5
124-48-1	DIBROMOCHLOROMETHANE	ND	5
79-00-5	1,1,2-TRICHLOROETHANE	ND	5
71-43-2	BENZENE	ND	5
10061-01-5	CIS-1,3-DICHLOROPROPENE	ND	5
110-75-8	2-CHLOROETHYL VINYL ETHER	ND	50
75-25-2	BROMOFORM	ND	5
119-78-6	2-HEXANONE	ND	30
108-10-1	4-METHYL-2-PENTANONE	ND	30
127-18-4	TETRACHLOROETHENE	ND	5
79-34-5	1,1,2,2 TETRACHLOROETHANE	ND	5
108-88-3	TOLUENE	ND	5
108-90-7	CHLOROBENZENE	ND	5
100-41-4	ETHYLBENZENE	ND	5
75-69-4	TRICHLOROFLUOROMETHANE	ND	5
100-42-5	STYRENE	ND	5
95-47-6	TOTAL XYLENES	5	5
95-50-1	1,2-DICHLOROBENZENE	ND	5
541-73-1	1,3-DICHLOROBENZENE	ND	5
106-46-7	1,4-DICHLOROBENZENE	ND	5



CENTRUM ANALYTICAL LABORATORIES

CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

CLIENT : Bermite Division of Whittaker
SITE : Bermite
SAMPLE : 317-2092-5
MATRIX : Soil

DATE RECEIVED: 01/06/88
DATE ANALYZED: 01/18/88
SAMPLE AMOUNT: 1.0 gms
STANDARD ID : VOA33

EPA METHOD 8240 (624)

CAS #	COMPOUND:	CONC: UG/KG (ppb)	DETECTION LIMIT:
74-87-3	CHLOROMETHANE	ND	30
74-83-9	BROMOMETHANE	ND	30
75-01-4	VINYL CHLORIDE	ND	30
75-00-3	CHLOROETHANE	ND	30
75-09-2	METHYLENE CHLORIDE	ND	50
67-64-1	ACETONE	ND	50
75-15-0	CARBON DISULFIDE	ND	5
75-35-4	1,1-DICHLOROETHENE	ND	5
75-34-3	1,1-DICHLOROETHANE	ND	5
156-60-5	TRANS-1,2-DICHLOROETHENE	ND	5
67-66-3	CHLOROFORM	ND	5
107-06-2	1,2-DICHLOROETHANE	ND	5
78-93-3	2-BUTANONE	ND	50
71-55-6	1,1,1-TRICHLOROETHANE	ND	5
16-23-5	CARBON TETRACHLORIDE	ND	5
108-05-4	VINYL ACETATE	ND	30
75-27-4	BROMODICHLOROMETHANE	ND	5
78-87-5	1,2-DICHLOROPROPANE	ND	5
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ND	5
79-01-6	TRICHLOROETHENE	ND	5
124-48-1	DIBROMOCHLOROMETHANE	ND	5
79-00-5	1,1,2-TRICHLOROETHANE	ND	5
71-43-2	BENZENE	ND	5
10061-01-5	CIS-1,3-DICHLOROPROPENE	ND	5
110-75-8	2-CHLOROETHYL VINYL ETHER	ND	50
75-25-2	BROMOFORM	ND	5
119-78-6	2-HEXANONE	ND	30
108-10-1	4-METHYL-2-PENTANONE	ND	30
127-18-4	TETRACHLOROETHENE	ND	5
79-34-5	1,1,2,2 TETRACHLOROETHANE	ND	5
108-88-3	TOLUENE	ND	5
108-90-7	CHLOROBENZENE	ND	5
100-41-4	ETHYLBENZENE	ND	5
75-69-4	TRICHLOROFLUOROMETHANE	ND	5
100-42-5	STYRENE	ND	5
95-47-6	TOTAL XYLENES	ND	5
95-50-1	1,2-DICHLOROBENZENE	ND	5
541-73-1	1,3-DICHLOROBENZENE	ND	5
106-46-7	1,4-DICHLOROBENZENE	ND	5

CLIENT : Bermite Division of Whittaker
 SITE : Bermite
 SAMPLE : 317-2092-6
 MATRIX : Soil

DATE RECIEVED: 01/06/88
 DATE ANALYZED: 01/18/88
 SAMPLE AMOUNT: 1.0 gms
 STANDARD ID : VOA33

EPA METHOD 8240 (624)

CAS #	COMPOUND:	CONC: UG/KG (ppb)	DETECTION LIMIT:
74-87-3	CHLOROMETHANE	ND	30
74-83-9	BROMOMETHANE	ND	30
75-01-4	VINYL CHLORIDE	ND	30
75-00-3	CHLOROETHANE	ND	30
75-09-2	METHYLENE CHLORIDE	ND	50
67-64-1	ACETONE	ND	50
75-15-0	CARBON DISULFIDE	ND	5
75-35-4	1,1-DICHLOROETHENE	ND	5
75-34-3	1,1-DICHLOROETHANE	ND	5
156-60-5	TRANS-1,2-DICHLOROETHENE	ND	5
67-66-3	CHLOROFORM	ND	5
107-06-2	1,2-DICHLOROETHANE	ND	5
78-93-3	2-BUTANONE	ND	50
71-55-6	1,1,1-TRICHLOROETHANE	ND	5
16-23-5	CARBON TETRACHLORIDE	ND	5
108-05-4	VINYL ACETATE	ND	30
75-27-4	BROMODICHLOROMETHANE	ND	5
78-87-5	1,2-DICHLOROPROPANE	ND	5
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ND	5
79-01-6	TRICHLOROETHENE	ND	5
124-48-1	DIBROMOCHLOROMETHANE	ND	5
79-00-5	1,1,2-TRICHLOROETHANE	ND	5
71-43-2	BENZENE	ND	5
10061-01-5	CIS-1,3-DICHLOROPROPENE	ND	5
110-75-8	2-CHLOROETHYL VINYL ETHER	ND	50
75-25-2	BROMOFORM	ND	5
119-78-6	2-HEXANONE	ND	30
108-10-1	4-METHYL-2-PENTANONE	ND	30
127-18-4	TETRACHLOROETHENE	ND	5
79-34-5	1,1,2,2 TETRACHLOROETHANE	ND	5
108-88-3	TOLUENE	ND	5
108-90-7	CHLOROBENZENE	ND	5
100-41-4	ETHYLBENZENE	ND	5
75-69-4	TRICHLOROFLUOROMETHANE	ND	5
100-42-5	STYRENE	ND	5
95-47-6	TOTAL XYLENES	ND	5
95-50-1	1,2-DICHLOROBENZENE	ND	5
541-73-1	1,3-DICHLOROBENZENE	ND	5
106-46-7	1,4-DICHLOROBENZENE	ND	5

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94119-10

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-1397-1

REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

Compound	<u>ug/kg</u>	Detection Limit <u>ug/kg</u>
Acetone	ND	* 10
Benzene	ND	* 5.0
Butyl Acetate	ND	* 5.0
Carbon Disulfide	ND	* 5.0
Chloroform	ND	* 5.0
Decane	ND	* 5.0
Ethyl Benzene	ND	* 5.0
Methylene Chloride	ND	* 5.0
Methyl Ethyl Ketone	ND	*10.0

Compound	<u>ug/kg</u>	Detection Limit <u>ug/kg</u>
Methyl Methacrylate	ND	* 5.0
Styrene	ND	* 5.0
Tetrachloroethene	ND	* 5.0
1,1,1-Trichloroethane	ND	* 5.0
Trichloroethene	ND	* 5.0
Toluene	ND	* 5.0
Xylenes	ND	* 5.0
Undecane	ND	* 5.0

* = less than

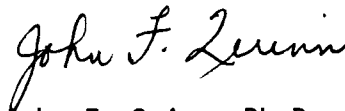
ND = Not Detected



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1

Respectfully submitted,



John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94119-1 Duplicate

DATE ANALYZED: 11/30/87

SAMPLE I.D.: 317-6631-1

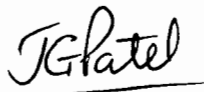
REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

Compound	ug/kg	Detection Limit ug/kg
Acetone	ND	* 10
Benzene	ND	* 5.0
Butyl Acetate	ND	* 5.0
Carbon Disulfide	ND	* 5.0
Chloroform	ND	* 5.0
Decane	ND	* 5.0
Ethyl Benzene	ND	* 5.0
Methylene Chloride	ND	* 5.0
Methyl Ethyl Ketone	ND	* 10.0

Compound	ug/kg	Detection Limit ug/kg
Methyl Methacrylate	ND	* 5.0
Styrene	ND	* 5.0
Tetrachloroethene	12	* 5.0
1,1,1-Trichloroethane	ND	* 5.0
Trichloroethene	14	* 5.0
Toluene	ND	* 5.0
Xylenes	ND	* 5.0
Undecane	ND	* 5.0

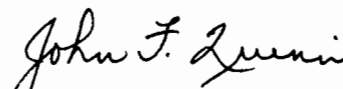
* = less than
ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1



John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94120-3 Spiked @ 10 PPB

DATE ANALYZED: 11/30/87

SAMPLE I.D.: EFA-3709-5

REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

Compound	Percent Recovery
Acetone	100
Benzene	90
Butyl Acetate	99
Carbon Disulfide	63
Chloroform	92
Decane	26
Ethyl Benzene	77
Methylene Chloride	75
Methyl Ethyl Ketone	97

Compound	Percent Recovery
Methyl Methacrylate	97
Styrene	77
Tetrachloroethene	82
1,1,1-Trichloroethane	93
Trichloroethene	86
Toluene	85
Xylenes	75
Undecane	17

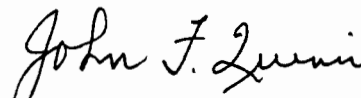
* = less than
ND = Not Detected



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1

Respectfully submitted,



John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94119

DATE ANALYZED: 12/02/87

SAMPLE I.D.: Solvent Blank

REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

Compound	Detection		Compound	Detection	
	ug/kg	Limit ug/kg		ug/kg	Limit ug/kg
Acetone	ND	* 10	Methyl Methacrylate	ND	* 5.0
Benzene	ND	* 5.0	Styrene	ND	* 5.0
Butyl Acetate	ND	* 5.0	Tetrachloroethene	ND	* 5.0
Carbon Disulfide	ND	* 5.0	1,1,1-Trichloroethane	ND	* 5.0
Chloroform	ND	* 5.0	Trichloroethene	ND	* 5.0
Decane	ND	* 5.0	Toluene	ND	* 5.0
Ethyl Benzene	ND	* 5.0	Xylenes	ND	* 5.0
Methylene Chloride	ND	* 5.0	Undecane	ND	* 5.0
Methyl Ethyl Ketone	ND	*10.0			

* = less than

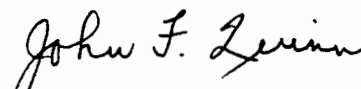
ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1



John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94119-17 Duplicate

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-3369-2

REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

Compound	ug/kg	Detection Limit ug/kg
Acetone	ND	* 10
Benzene	ND	* 5.0
Butyl Acetate	ND	* 5.0
Carbon Disulfide	ND	* 5.0
Chloroform	ND	* 5.0
Decane	ND	* 5.0
Ethyl Benzene	ND	* 5.0
Methylene Chloride	ND	* 5.0
Methyl Ethyl Ketone	ND	*10.0

Compound	ug/kg	Detection Limit ug/kg
Methyl Methacrylate	ND	* 5.0
Styrene	ND	* 5.0
Tetrachloroethene	ND	* 5.0
1,1,1-Trichloroethane	ND	* 5.0
Trichloroethene	ND	* 5.0
Toluene	ND	* 5.0
Xylenes	ND	* 5.0
Undecane	ND	* 5.0

* = less than

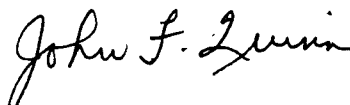
ND = Not Detected



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1

Respectfully submitted,



John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94119-26 Spiked @ 10 PPB

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-7523-2

REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

<u>Compound</u>	<u>Percent Recovery</u>
Acetone	98
Benzene	87
Butyl Acetate	100
Carbon Disulfide	45
Chloroform	82
Decane	20
Ethyl Benzene	73
Methylene Chloride	70
Methyl Ethyl Ketone	100

<u>Compound</u>	<u>Percent Recovery</u>
Methyl Methacrylate	100
Styrene	78
Tetrachloroethene	73
1,1,1-Trichloroethane	95
Trichloroethene	80
Toluene	85
Xylenes	72
Undecane	12

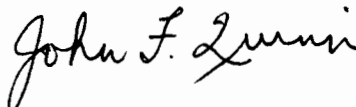
* = less than
ND = Not Detected



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1

Respectfully submitted,



John F. Quinn, Ph.D.
Environmental Chemist



CENTRUM ANALYTICAL LABORATORIES

CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

CLIENT : Bermite Division of Whittaker
 SITE : Centrum Analytical Laboratory
 SAMPLE : Lab Blank
 MATRIX : Water

DATE RECIEVED: 01/06/88
 DATE ANALYZED: 01/15/88
 SAMPLE AMOUNT: 5.0 mls
 STANDARD ID : VOA31

EPA METHOD 8240 (624)

CAS #	COMPOUND:	CONC: UG/L (ppb)	DETECTION LIMIT:
74-87-3	CHLOROMETHANE	ND	5
74-83-9	BROMOMETHANE	ND	5
75-01-4	VINYL CHLORIDE	ND	5
75-00-3	CHLOROETHANE	ND	5
75-09-2	METHYLENE CHLORIDE	2	10
67-64-1	ACETONE	10	10
75-15-0	CARBON DISULFIDE	2	1
75-35-4	1,1-DICHLOROETHENE	ND	1
75-34-3	1,1-DICHLOROETHANE	ND	1
156-60-5	TRANS-1,2-DICHLOROETHENE	ND	1
67-66-3	CHLOROFORM	ND	1
107-06-2	1,2-DICHLOROETHANE	ND	1
78-93-3	2-BUTANONE	ND	10
71-55-6	1,1,1-TRICHLOROETHANE	ND	1
16-23-5	CARBON TETRACHLORIDE	ND	1
108-05-4	VINYL ACETATE	ND	5
75-27-4	BROMODICHLOROMETHANE	ND	1
78-87-5	1,2-DICHLOROPROPANE	ND	1
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ND	1
79-01-6	TRICHLOROETHENE	ND	1
124-48-1	DIBROMOCHLOROMETHANE	ND	1
79-00-5	1,1,2-TRICHLOROETHANE	ND	1
71-43-2	BENZENE	ND	1
10061-01-5	CIS-1,3-DICHLOROPROPENE	ND	1
110-75-8	2-CHLOROETHYL VINYL ETHER	ND	10
75-25-2	BROMOFORM	ND	1
119-78-6	2-HEXANONE	ND	5
108-10-1	4-METHYL-2-PENTANONE	6	5
127-18-4	TETRACHLOROETHENE	ND	1
79-34-5	1,1,2,2 TETRACHLOROETHANE	ND	1
108-88-3	TOLUENE	2	1
108-90-7	CHLOROBENZENE	ND	1
100-41-4	ETHYLBENZENE	ND	1
75-69-4	TRICHLOROFLUOROMETHANE	ND	1
100-42-5	STYRENE	ND	1
95-47-6	TOTAL XYLENES	ND	1
95-50-1	1,2-DICHLOROBENZENE	ND	1
541-73-1	1,3-DICHLOROBENZENE	ND	1
106-46-7	1,4-DICHLOROBENZENE	ND	1

CLIENT : Bermite Division of Whittaker
 SITE : Centrum Analytical Laboratory
 SAMPLE : Lab Blank
 MATRIX : Water

DATE RECEIVED: 01/06/88
 DATE ANALYZED: 01/17/88
 SAMPLE AMOUNT: 5.0 mls
 STANDARD ID : VOA32

EPA METHOD 8240 (624)

CAS #	COMPOUND:	CONC: UG/L (ppb)	DETECTION LIMIT:
74-87-3	CHLOROMETHANE	ND	5
74-83-9	BROMOMETHANE	ND	5
75-01-4	VINYL CHLORIDE	ND	5
75-00-3	CHLOROETHANE	ND	5
75-09-2	METHYLENE CHLORIDE	2	10
67-64-1	ACETONE	8	10
75-15-0	CARBON DISULFIDE	3	1
75-35-4	1,1-DICHLOROETHENE	ND	1
75-34-3	1,1-DICHLOROETHANE	ND	1
156-60-5	TRANS-1,2-DICHLOROETHENE	ND	1
67-66-3	CHLOROFORM	ND	1
107-06-2	1,2-DICHLOROETHANE	ND	1
78-93-3	2-BUTANONE	ND	10
71-55-6	1,1,1-TRICHLOROETHANE	ND	1
16-23-5	CARBON TETRACHLORIDE	ND	1
108-05-4	VINYL ACETATE	ND	5
75-27-4	BROMODICHLOROMETHANE	ND	1
78-87-5	1,2-DICHLOROPROPANE	ND	1
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ND	1
79-01-6	TRICHLOROETHENE	ND	1
124-48-1	DIBROMOCHLOROMETHANE	ND	1
79-00-5	1,1,2-TRICHLOROETHANE	ND	1
71-43-2	BENZENE	ND	1
10061-01-5	CIS-1,3-DICHLOROPROPENE	ND	1
110-75-8	2-CHLOROETHYL VINYL ETHER	ND	10
75-25-2	BROMOFORM	ND	1
119-78-6	2-HEXANONE	ND	5
108-10-1	4-METHYL-2-PENTANONE	6	5
127-18-4	TETRACHLOROETHENE	ND	1
79-34-5	1,1,2,2 TETRACHLOROETHANE	ND	1
108-88-3	TOLUENE	ND	1
108-90-7	CHLOROBENZENE	ND	1
100-41-4	ETHYLBENZENE	ND	1
75-69-4	TRICHLOROFLUOROMETHANE	ND	1
100-42-5	STYRENE	ND	1
95-47-6	TOTAL XYLENES	ND	1
95-50-1	1,2-DICHLOROBENZENE	ND	1
541-73-1	1,3-DICHLOROBENZENE	ND	1
106-46-7	1,4-DICHLOROBENZENE	ND	1



CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

CLIENT : Bermite Division of Whittaker
 SITE : Centrum Analytical Laboratory
 SAMPLE : Lab Blank
 MATRIX : Water

DATE RECIEVED: 01/06/88
 DATE ANALYZED: 01/18/88
 SAMPLE AMOUNT: 5.0 mls
 STANDARD ID : VOA33

EPA METHOD 8240 (624)

CAS #	COMPOUND:	CONC: UG/L (ppb)	DETECTION LIMIT:
74-87-3	CHLOROMETHANE	ND	5
74-83-9	BROMOMETHANE	ND	5
75-01-4	VINYL CHLORIDE	ND	5
75-00-3	CHLOROETHANE	ND	5
75-09-2	METHYLENE CHLORIDE	3	10
67-64-1	ACETONE	ND	10
75-15-0	CARBON DISULFIDE	1	1
75-35-4	1,1-DICHLOROETHENE	ND	1
75-34-3	1,1-DICHLOROETHANE	ND	1
156-60-5	TRANS-1,2-DICHLOROETHENE	ND	1
67-66-3	CHLOROFORM	ND	1
107-06-2	1,2-DICHLOROETHANE	ND	1
78-93-3	2-BUTANONE	ND	10
71-55-6	1,1,1-TRICHLOROETHANE	ND	1
16-23-5	CARBON TETRACHLORIDE	ND	1
108-05-4	VINYL ACETATE	ND	5
75-27-4	BROMODICHLOROMETHANE	ND	1
78-87-5	1,2-DICHLOROPROPANE	ND	1
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ND	1
79-01-6	TRICHLOROETHENE	ND	1
124-48-1	DIBROMOCHLOROMETHANE	ND	1
79-00-5	1,1,2-TRICHLOROETHANE	ND	1
71-43-2	BENZENE	ND	1
10061-01-5	CIS-1,3-DICHLOROPROPENE	ND	1
110-75-8	2-CHLOROETHYL VINYL ETHER	ND	10
75-25-2	BROMOFORM	ND	1
119-78-6	2-HEXANONE	ND	5
108-10-1	4-METHYL-2-PENTANONE	ND	5
127-18-4	TETRACHLOROETHENE	ND	1
79-34-5	1,1,2,2 TETRACHLOROETHANE	ND	1
108-88-3	TOLUENE	2	1
108-90-7	CHLOROBENZENE	ND	1
100-41-4	ETHYLBENZENE	ND	1
75-69-4	TRICHLOROFLUOROMETHANE	ND	1
100-42-5	STYRENE	ND	1
95-47-6	TOTAL XYLENES	ND	1
95-50-1	1,2-DICHLOROBENZENE	ND	1
541-73-1	1,3-DICHLOROBENZENE	ND	1
106-46-7	1,4-DICHLOROBENZENE	ND	1

CLIENT : Bermite Division of Whittaker
 SITE : Centrum Analytical Laboratory
 SAMPLE : Lab Blank
 MATRIX : Water

DATE RECIEVED: 01/06/88
 DATE ANALYZED: 01/19/88
 SAMPLE AMOUNT: 5.0 ml_s
 STANDARD ID : VOA34

EPA METHOD 8240 (624)

CAS #	COMPOUND:	CONC: UG/L (ppb)	DETECTION LIMIT:
74-87-3	CHLOROMETHANE	ND	5
74-83-9	BROMOMETHANE	ND	5
75-01-4	VINYL CHLORIDE	ND	5
75-00-3	CHLOROETHANE	ND	5
75-09-2	METHYLENE CHLORIDE	3	10
67-64-1	ACETONE	3	10
75-15-0	CARBON DISULFIDE	1	1
75-35-4	1,1-DICHLOROETHENE	ND	1
75-34-3	1,1-DICHLOROETHANE	ND	1
156-60-5	TRANS-1,2-DICHLOROETHENE	ND	1
67-66-3	CHLOROFORM	ND	1
107-06-2	1,2-DICHLOROETHANE	ND	1
78-93-3	2-BUTANONE	ND	10
71-55-6	1,1,1-TRICHLOROETHANE	ND	1
16-23-5	CARBON TETRACHLORIDE	ND	1
108-05-4	VINYL ACETATE	ND	5
75-27-4	BROMODICHLOROMETHANE	ND	1
78-87-5	1,2-DICHLOROPROPANE	ND	1
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ND	1
79-01-6	TRICHLOROETHENE	ND	1
124-48-1	DIBROMOCHLOROMETHANE	ND	1
79-00-5	1,1,2-TRICHLOROETHANE	ND	1
71-43-2	BENZENE	ND	1
10061-01-5	CIS-1,3-DICHLOROPROPENE	ND	1
110-75-8	2-CHLOROETHYL VINYL ETHER	ND	10
75-25-2	BROMOFORM	ND	1
119-78-6	2-HEXANONE	ND	5
108-10-1	4-METHYL-2-PENTANONE	ND	5
127-18-4	TETRACHLOROETHENE	ND	1
79-34-5	1,1,2,2 TETRACHLOROETHANE	ND	1
108-88-3	TOLUENE	2	1
108-90-7	CHLOROBENZENE	ND	1
100-41-4	ETHYLBENZENE	ND	1
75-69-4	TRICHLOROFLUOROMETHANE	ND	1
100-42-5	STYRENE	ND	1
95-47-6	TOTAL XYLENES	ND	1
95-50-1	1,2-DICHLOROBENZENE	ND	1
541-73-1	1,3-DICHLOROBENZENE	ND	1
106-46-7	1,4-DICHLOROBENZENE	ND	1

MATRIX SPIKE (MS AND MSD)
 % RECOVERY AND RPD SUMMARY
 LABORATORY: CENTRUM ANALYTICAL
 METHOD: EPA 8240 (624)

DATE RECEIVED: 01/06/88	UNITS: UG/KG (PPB)
DATE ANALYZED: 01/19/88	MATRIX: SOIL
SAMPLE ID : BERMITE 317-1397-4	SAMPLE AMOUNT: 1.0 GMS

COMPOUND:	CONC SPIKED:	CONC SAMPLE:	CONC MS:	% REC MS:	CONC MSD:	% REC MSD:	RPD:
1,1-DICHLOROETHENE	250	ND	274	110	274	110	0
TRICHLOROETHYLENE	250	ND	238	95	238	95	0
CHLOROBENZENE	250	ND	274	110	275	110	0
TOLUENE	250	ND	245	98	239	96	2
BENZENE	250	ND	233	93	225	90	3

% REC = (CONC MATRIX SPIKE - CONC SAMPLE) / (CONC SPIKED) * 100
 RPD = (MS - MSD) / ((MS + MSD) / 2) * 100

RECOVERY: 0 OUT OF 10 OUTSIDE QC LIMITS
 RPD: 0 OUT OF 5 OUTSIDE QC LIMITS

SOIL QUALITY CONTROL LIMITS:	RECOVERY:	RPD:
1,1-DICHLOROETHENE:	59-172	22
TRICHLOROETHYLENE:	62-137	24
CHLOROBENZENE:	60-133	21
TOLUENE:	59-139	21
BENZENE:	66-142	21



CENTRUM ANALYTICAL LABORATORIES

CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

MATRIX SPIKE (MS AND MSD)
% RECOVERY AND RPD SUMMARY
LABORATORY: CENTRUM ANALYTICAL
METHOD: EPA 8240 (624)

DATE RECIEVED:01/06/88

DATE ANALYZED:01/17/88

SAMPLE ID :BERMITE 317-3752-5

UNITS: UG/KG (PPB)

MATRIX:SOIL

SAMPLE AMOUNT:1.0 GMS

COMPOUND:	CONC SPIKED:	CONC SAMPLE:	CONC MS:	% REC MS:	CONC MSD:	% REC MSD:	RPD:
1,1-DICHLOROETHENE	250	ND	217	87	252	101	-15
TRICHLOROETHYLENE	250	43	246	81	263	88	-7
CHLOROBENZENE	250	ND	248	99	274	110	-10
TOLUENE	250	ND	241	96	255	102	-6
BENZENE	250	ND	221	88	245	98	-10

$\% \text{ REC} = (\text{CONC MATRIX SPIKE} - \text{CONC SAMPLE}) / (\text{CONC SPIKED}) * 100$

$\text{RPD} = (\text{MS} - \text{MSD}) / ((\text{MS} + \text{MSD}) / 2) * 100$

RECOVERY: 0 OUT OF 10 OUTSIDE QC LIMITS

RPD: 0 OUT OF 5 OUTSIDE QC LIMITS

SOIL QUALITY CONTROL LIMITS:

RECOVERY:

RPD:

1,1-DICHLOROETHENE:

59-172

22

TRICHLOROETHYLENE:

62-137

24

CHLOROBENZENE:

60-133

21

TOLUENE:

59-139

21

BENZENE:

66-142

21

Wenck Associates Inc.
832 Twelve Oaks Center
15500 Wayzata Boulevard
Wayzata, Minnesota 55390

February 8, 1988
J.N. 111-001
Page 1 of 2

Project: Bermite

Date Received: 01-06-88
Date Analyzed: 02-04-88
Samples Rcv'd: 103 soil

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LABORATORY RESULTS

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METHOD: Undecane, Decane by EPA Modified Method 8015

Sample Number	Decane	Undecane
317-0745-4	ND	ND
317-0745-5	ND	ND
317-0745-6	ND	ND
317-3752-4	ND	ND
317-3752-5	ND	ND
317-3752-6	ND	ND
317-6331-4	ND	ND
317-6331-5	ND	ND
BLANK	ND	ND
317-1397-6 Duplicate	ND	ND
317-1397-6 Spike with 518 (ppb) Decane and 535 (ppb) Undecane	506	511
317-6089-4 Duplicate	ND	ND
317-6089-4 Spike with 518 (ppb) Decane and 535 (ppb) Undecane	483	479
Detection Limit: ug/kg ppb	214	90

ND - Not Detected

Respectfully Submitted,

CENTRUM ANALYTICAL LABORATORIES


Ida Wallace
Laboratory Supervisor


Reber Brown, Ph.D.
Chemist

MAY:IW/lm

Wenck Associates Inc.
832 Twelve Oaks Center
15500 Wayzata Boulevard
Wayzata, Minnesota 55390

February 8, 1988
J.N. 111-001
Page 2 of 2

Project: Bermite

Date Received: 01-06-88
Date Analyzed: 02-04-88
Samples Rcv'd: 103 soil

=====

LABORATORY RESULTS

=====

METHOD: Undecane, Decane by EPA Modified Method 8015

<u>Sample Number</u>	<u>Decane</u>	<u>Undecane</u>
317-1397-4	ND	ND
317-1397-5	ND	ND
317-1397-6	ND	ND
317-2092-4	ND	ND
317-2092-5	ND	ND
317-2092-6	ND	ND
317-3369-4	ND	ND
317-3369-5	ND	ND
317-3369-6	ND	ND
317-6089-4	ND	ND
317-6089-5	ND	ND
317-6089-6	ND	ND
317-7573-4	ND	ND
317-7573-5	ND	ND
317-7573-6	ND	ND
Detection Limit:	ug/kg ppb 214	90

ND - Not Detected

Respectfully Submitted,

CENTRUM ANALYTICAL LABORATORIES

Ida Wallace
Ida Wallace
Laboratory Supervisor

Reber Brown
Reber Brown, Ph.D.
Chemist

MAY:IW/lm

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94119-11

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-1397-2

REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

Compound	ug/kg	Detection Limit ug/kg
Acetone	ND	* 10
Benzene	ND	* 5.0
Butyl Acetate	ND	* 5.0
Carbon Disulfide	ND	* 5.0
Chloroform	ND	* 5.0
Decane	ND	* 5.0
Ethyl Benzene	ND	* 5.0
Methylene Chloride	ND	* 5.0
Methyl Ethyl Ketone	ND	* 10.0

Compound	ug/kg	Detection Limit ug/kg
Methyl Methacrylate	ND	* 5.0
Styrene	ND	* 5.0
Tetrachloroethene	ND	* 5.0
1,1,1-Trichloroethane	ND	* 5.0
Trichloroethene	ND	* 5.0
Toluene	ND	* 5.0
Xylenes	ND	* 5.0
Undecane	ND	* 5.0

* = less than

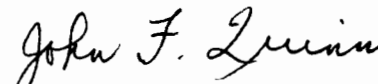
ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1



John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94119-12

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-1397-3

REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

Compound	ug/kg	Detection
		Limit ug/kg
Acetone	ND	* 10
Benzene	ND	* 5.0
Butyl Acetate	ND	* 5.0
Carbon Disulfide	ND	* 5.0
Chloroform	ND	* 5.0
Decane	ND	* 5.0
Ethyl Benzene	ND	* 5.0
Methylene Chloride	ND	* 5.0
Methyl Ethyl Ketone	ND	* 10.0

Compound	ug/kg	Detection
		Limit ug/kg
Methyl Methacrylate	ND	* 5.0
Styrene	ND	* 5.0
Tetrachloroethene	ND	* 5.0
1,1,1-Trichloroethane	ND	* 5.0
Trichloroethene	ND	* 5.0
Toluene	ND	* 5.0
Xylenes	ND	* 5.0
Undecane	ND	* 5.0

* = less than

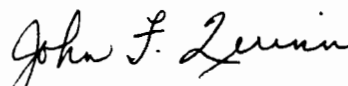
ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1



John F. Quinn, Ph.D.
Environmental Chemist

CLIENT : Bermite Division of Whittaker
 SITE : Bermite
 SAMPLE : 317-1397-4
 MATRIX : Soil

DATE RECEIVED: 01/06/88
 DATE ANALYZED: 01/19/88
 SAMPLE AMOUNT: 1.0 gms
 STANDARD ID : VOA34

EPA METHOD 8240 (624)

CAS #	COMPOUND:	CONC: UG/KG (ppb)	DETECTION LIMIT:
74-87-3	CHLOROMETHANE	ND	30
74-83-9	BROMOMETHANE	ND	30
75-01-4	VINYL CHLORIDE	ND	30
75-00-3	CHLOROETHANE	ND	30
75-09-2	METHYLENE CHLORIDE	ND	50
67-64-1	ACETONE	ND	50
75-15-0	CARBON DISULFIDE	ND	5
75-35-4	1,1-DICHLOROETHENE	ND	5
75-34-3	1,1-DICHLOROETHANE	ND	5
156-60-5	TRANS-1,2-DICHLOROETHENE	ND	5
67-66-3	CHLOROFORM	ND	5
107-06-2	1,2-DICHLOROETHANE	ND	5
78-93-3	2-BUTANONE	ND	50
71-55-6	1,1,1-TRICHLOROETHANE	ND	5
16-23-5	CARBON TETRACHLORIDE	ND	5
108-05-4	VINYL ACETATE	ND	30
75-27-4	BROMODICHLOROMETHANE	ND	5
78-87-5	1,2-DICHLOROPROPANE	ND	5
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ND	5
79-01-6	TRICHLOROETHENE	ND	5
124-48-1	DIBROMOCHLOROMETHANE	ND	5
79-00-5	1,1,2-TRICHLOROETHANE	ND	5
71-43-2	BENZENE	ND	5
10061-01-5	CIS-1,3-DICHLOROPROPENE	ND	5
110-75-8	2-CHLOROETHYL VINYL ETHER	ND	50
75-25-2	BROMOFORM	ND	5
119-78-6	2-HEXANONE	ND	30
108-10-1	4-METHYL-2-PENTANONE	ND	30
127-18-4	TETRACHLOROETHENE	ND	5
79-34-5	1,1,2,2 TETRACHLOROETHANE	ND	5
108-88-3	TOLUENE	ND	5
108-90-7	CHLOROBENZENE	ND	5
100-41-4	ETHYLBENZENE	ND	5
75-69-4	TRICHLOROFLUOROMETHANE	ND	5
100-42-5	STYRENE	ND	5
95-47-6	TOTAL XYLENES	ND	5
95-50-1	1,2-DICHLOROBENZENE	ND	5
541-73-1	1,3-DICHLOROBENZENE	ND	5
106-46-7	1,4-DICHLOROBENZENE	ND	5

CLIENT : Bermite Division of Whittaker
 SITE : Bermite
 SAMPLE : 317-1397-5
 MATRIX : Soil

DATE RECEIVED: 01/06/88
 DATE ANALYZED: 01/18/88
 SAMPLE AMOUNT: 1.0 gms
 STANDARD ID : VOA33

EPA METHOD 8240 (624)

CAS #	COMPOUND:	CONC: UG/KG (ppb)	DETECTION LIMIT:
74-87-3	CHLOROMETHANE	ND	30
74-83-9	BROMOMETHANE	ND	30
75-01-4	VINYL CHLORIDE	ND	30
75-00-3	CHLOROETHANE	ND	30
75-09-2	METHYLENE CHLORIDE	ND	50
67-64-1	ACETONE	ND	50
75-15-0	CARBON DISULFIDE	ND	5
75-35-4	1,1-DICHLOROETHENE	ND	5
75-34-3	1,1-DICHLOROETHANE	ND	5
156-60-5	TRANS-1,2-DICHLOROETHENE	ND	5
67-66-3	CHLOROFORM	ND	5
107-06-2	1,2-DICHLOROETHANE	ND	5
78-93-3	2-BUTANONE	ND	50
71-55-6	1,1,1-TRICHLOROETHANE	ND	5
16-23-5	CARBON TETRACHLORIDE	ND	5
108-05-4	VINYL ACETATE	ND	30
75-27-4	BROMODICHLOROMETHANE	ND	5
78-87-5	1,2-DICHLOROPROPANE	ND	5
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ND	5
79-01-6	TRICHLOROETHENE	ND	5
124-48-1	DIBROMOCHLOROMETHANE	ND	5
79-00-5	1,1,2-TRICHLOROETHANE	ND	5
71-43-2	BENZENE	ND	5
10061-01-5	CIS-1,3-DICHLOROPROPENE	ND	5
110-75-8	2-CHLOROETHYL VINYL ETHER	ND	50
75-25-2	BROMOFORM	ND	5
119-78-6	2-HEXANONE	ND	30
108-10-1	4-METHYL-2-PENTANONE	ND	30
127-18-4	TETRACHLOROETHENE	ND	5
79-34-5	1,1,2,2 TETRACHLOROETHANE	ND	5
108-88-3	TOLUENE	ND	5
108-90-7	CHLOROBENZENE	ND	5
100-41-4	ETHYLBENZENE	ND	5
75-69-4	TRICHLOROFLUOROMETHANE	ND	5
100-42-5	STYRENE	ND	5
95-47-6	TOTAL XYLENES	ND	5
95-50-1	1,2-DICHLOROBENZENE	ND	5
541-73-1	1,3-DICHLOROBENZENE	ND	5
106-46-7	1,4-DICHLOROBENZENE	ND	5

CLIENT : Bermite Division of Whittaker
 SITE : Bermite
 SAMPLE : 317-1397-6
 MATRIX : Soil

DATE RECEIVED: 01/06/88
 DATE ANALYZED: 01/18/88
 SAMPLE AMOUNT: 1.0 gms
 STANDARD ID : VOA33

EPA METHOD 8240 (624)

CAS #	COMPOUND:	CONC: UG/KG (ppb)	DETECTION LIMIT:
74-87-3	CHLOROMETHANE	ND	30
74-83-9	BROMOMETHANE	ND	30
75-01-4	VINYL CHLORIDE	ND	30
75-00-3	CHLOROETHANE	ND	30
75-09-2	METHYLENE CHLORIDE	ND	50
67-64-1	ACETONE	ND	50
75-15-0	CARBON DISULFIDE	ND	5
75-35-4	1,1-DICHLOROETHENE	ND	5
75-34-3	1,1-DICHLOROETHANE	ND	5
156-60-5	TRANS-1,2-DICHLOROETHENE	ND	5
67-66-3	CHLOROFORM	ND	5
107-06-2	1,2-DICHLOROETHANE	ND	5
78-93-3	2-BUTANONE	ND	50
71-55-6	1,1,1-TRICHLOROETHANE	ND	5
16-23-5	CARBON TETRACHLORIDE	ND	5
108-05-4	VINYL ACETATE	ND	30
75-27-4	BROMODICHLOROMETHANE	ND	5
78-87-5	1,2-DICHLOROPROPANE	ND	5
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ND	5
79-01-6	TRICHLOROETHENE	ND	5
124-48-1	DIBROMOCHLOROMETHANE	ND	5
79-00-5	1,1,2-TRICHLOROETHANE	ND	5
71-43-2	BENZENE	ND	5
10061-01-5	CIS-1,3-DICHLOROPROPENE	ND	5
110-75-8	2-CHLOROETHYL VINYL ETHER	ND	50
75-25-2	BROMOFORM	ND	5
119-78-6	2-HEXANONE	ND	30
108-10-1	4-METHYL-2-PENTANONE	ND	30
127-18-4	TETRACHLOROETHENE	ND	5
79-34-5	1,1,2,2 TETRACHLOROETHANE	ND	5
108-88-3	TOLUENE	ND	5
108-90-7	CHLOROBENZENE	ND	5
100-41-4	ETHYLBENZENE	ND	5
75-69-4	TRICHLOROFLUOROMETHANE	ND	5
100-42-5	STYRENE	ND	5
95-47-6	TOTAL XYLENES	ND	5
95-50-1	1,2-DICHLOROBENZENE	ND	5
541-73-1	1,3-DICHLOROBENZENE	ND	5
106-46-7	1,4-DICHLOROBENZENE	ND	5

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94119-1

DATE ANALYZED: 11/30/87

SAMPLE I.D.: 317-6331-1

REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

Compound	ug/kg	Detection Limit ug/kg
Acetone	ND	* 10
Benzene	ND	* 5.0
Butyl Acetate	ND	* 5.0
Carbon Disulfide	ND	* 5.0
Chloroform	ND	* 5.0
Decane	ND	* 5.0
Ethyl Benzene	ND	* 5.0
Methylene Chloride	ND	* 5.0
Methyl Ethyl Ketone	ND	*10.0

Compound	ug/kg	Detection Limit ug/kg
Methyl Methacrylate	ND	* 5.0
Styrene	ND	* 5.0
Tetrachloroethene	12	* 5.0
1,1,1-Trichloroethane	ND	* 5.0
Trichloroethene	13	* 5.0
Toluene	ND	* 5.0
Xylenes	ND	* 5.0
Undecane	ND	* 5.0

* = less than

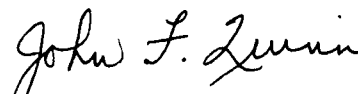
ND = Not Detected



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1

Respectfully submitted,



John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94119-2

DATE ANALYZED: 11/30/87

SAMPLE I.D.: 317-6331-2

REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

Compound	Detection		Compound	Detection	
	ug/kg	Limit ug/kg		ug/kg	Limit ug/kg
Acetone	ND	* 10	Methyl Methacrylate	ND	* 5.0
Benzene	ND	* 5.0	Styrene	ND	* 5.0
Butyl Acetate	ND	* 5.0	Tetrachloroethene	ND	* 5.0
Carbon Disulfide	ND	* 5.0	1,1,1-Trichloroethane	ND	* 5.0
Chloroform	ND	* 5.0	Trichloroethene	ND	* 5.0
Decane	ND	* 5.0	Toluene	ND	* 5.0
Ethyl Benzene	ND	* 5.0	Xylenes	ND	* 5.0
Methylene Chloride	ND	* 5.0	Undecane	ND	* 5.0
Methyl Ethyl Ketone	ND	*10.0			

* = less than

ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist



John F. Quinn, Ph.D.
Environmental Chemist

JGP/JFQ:me1

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94119-3

DATE ANALYZED: 11/30/87

SAMPLE I.D.: 317-6331-3

REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

Compound	<u>ug/kg</u>	Detection Limit <u>ug/kg</u>
Acetone	ND	* 10
Benzene	ND	* 5.0
Butyl Acetate	ND	* 5.0
Carbon Disulfide	ND	* 5.0
Chloroform	ND	* 5.0
Decane	ND	* 5.0
Ethyl Benzene	ND	* 5.0
Methylene Chloride	ND	* 5.0
Methyl Ethyl Ketone	ND	*10.0

Compound	<u>ug/kg</u>	Detection Limit <u>ug/kg</u>
Methyl Methacrylate	ND	* 5.0
Styrene	ND	* 5.0
Tetrachloroethene	ND	* 5.0
1,1,1-Trichloroethane	ND	* 5.0
Trichloroethene	ND	* 5.0
Toluene	ND	* 5.0
Xylenes	ND	* 5.0
Undecane	ND	* 5.0

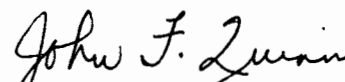
* = less than
ND = Not Detected



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1

Respectfully submitted,



John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94119-4

DATE ANALYZED: 11/30/87

SAMPLE I.D.: 317-6331-4

REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

<u>Compound</u>	<u>ug/kg</u>	Detection
		Limit <u>ug/kg</u>
Acetone	45	* 10
Benzene	ND	* 5.0
Butyl Acetate	ND	* 5.0
Carbon Disulfide	ND	* 5.0
Chloroform	ND	* 5.0
Decane	ND	* 5.0
Ethyl Benzene	ND	* 5.0
Methylene Chloride	34	* 5.0
Methyl Ethyl Ketone	14	*10.0

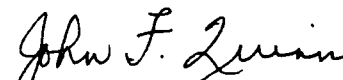
<u>Compound</u>	<u>ug/kg</u>	Detection
		Limit <u>ug/kg</u>
Methyl Methacrylate	ND	* 5.0
Styrene	ND	* 5.0
Tetrachloroethene	12	* 5.0
1,1,1-Trichloroethane	ND	* 5.0
Trichloroethene	10	* 5.0
Toluene	ND	* 5.0
Xylenes	ND	* 5.0
Undecane	ND	* 5.0

* = less than
ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist



John F. Quinn, Ph.D.
Environmental Chemist

JGP/JFQ:me1

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94119-5

DATE ANALYZED: 11/30/87

SAMPLE I.D.: 317-6331-5

REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

Compound	ug/kg	Detection
		Limit ug/kg
Acetone	26	* 10
Benzene	ND	* 5.0
Butyl Acetate	ND	* 5.0
Carbon Disulfide	ND	* 5.0
Chloroform	ND	* 5.0
Decane	ND	* 5.0
Ethyl Benzene	ND	* 5.0
Methylene Chloride	8.8	* 5.0
Methyl Ethyl Ketone	6.5	*10.0

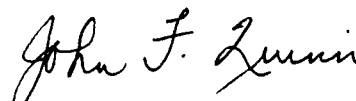
Compound	ug/kg	Detection
		Limit ug/kg
Methyl Methacrylate	ND	* 5.0
Styrene	ND	* 5.0
Tetrachloroethene	12	* 5.0
1,1,1-Trichloroethane	ND	* 5.0
Trichloroethene	10	* 5.0
Toluene	ND	* 5.0
Xylenes	ND	* 5.0
Undecane	ND	* 5.0

* = less than
ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist



John F. Quinn, Ph.D.
Environmental Chemist

JGP/JFQ:me1



CENTRUM ANALYTICAL LABORATORIES

CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

CLIENT : Bermite Division of Whittaker
SITE : Bermite
SAMPLE : 317-6331-4
MATRIX : Soil

DATE RECEIVED: 01/06/88
DATE ANALYZED: 01/17/88
SAMPLE AMOUNT: 1.0 gms
STANDARD ID : VOA32

EPA METHOD 8240 (624)

CAS #	COMPOUND:	CONC: UG/KG (ppb)	DETECTION LIMIT:
74-87-3	CHLOROMETHANE	ND	30
74-83-9	BROMOMETHANE	ND	30
75-01-4	VINYL CHLORIDE	ND	30
75-00-3	CHLOROETHANE	ND	30
75-09-2	METHYLENE CHLORIDE	180	50
67-64-1	ACETONE	ND	50
75-15-0	CARBON DISULFIDE	ND	5
75-35-4	1,1-DICHLOROETHENE	ND	5
75-34-3	1,1-DICHLOROETHANE	ND	5
156-60-5	TRANS-1,2-DICHLOROETHENE	75	5
67-66-3	CHLOROFORM	ND	5
107-06-2	1,2-DICHLOROETHANE	ND	5
78-93-3	2-BUTANONE	ND	50
71-55-6	1,1,1-TRICHLOROETHANE	ND	5
16-23-5	CARBON TETRACHLORIDE	ND	5
108-05-4	VINYL ACETATE	ND	30
75-27-4	BROMODICHLOROMETHANE	ND	5
78-87-5	1,2-DICHLOROPROPANE	ND	5
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ND	5
79-01-6	TRICHLOROETHENE	580	5
124-48-1	DIBROMOCHLOROMETHANE	ND	5
79-00-5	1,1,2-TRICHLOROETHANE	ND	5
71-43-2	BENZENE	ND	5
10061-01-5	CIS-1,3-DICHLOROPROPENE	ND	5
110-75-8	2-CHLOROETHYL VINYL ETHER	ND	50
75-25-2	BROMOFORM	ND	5
119-78-6	2-HEXANONE	ND	30
108-10-1	4-METHYL-2-PENTANONE	ND	30
127-18-4	TETRACHLOROETHENE	100	5
79-34-5	1,1,2,2 TETRACHLOROETHANE	ND	5
108-88-3	TOLUENE	8	5
108-90-7	CHLOROBENZENE	ND	5
100-41-4	ETHYLBENZENE	ND	5
75-69-4	TRICHLOROFLUOROMETHANE	ND	5
100-42-5	STYRENE	ND	5
95-47-6	TOTAL XYLENES	ND	5
95-50-1	1,2-DICHLOROBENZENE	ND	5
541-73-1	1,3-DICHLOROBENZENE	ND	5
106-46-7	1,4-DICHLOROBENZENE	ND	5



CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

CLIENT : Bermite Division of Whittaker
 SITE : Bermite
 SAMPLE : 317-6331-5
 MATRIX : Soil

DATE RECIEVED: 01/06/88
 DATE ANALYZED: 01/18/88
 SAMPLE AMOUNT: 1.0 gms
 STANDARD ID : VOA33

EPA METHOD 8240 (624)

CAS #	COMPOUND:	CONC: UG/KG (ppb)	DETECTION LIMIT:
74-87-3	CHLOROMETHANE	ND	30
74-83-9	BROMOMETHANE	ND	30
75-01-4	VINYL CHLORIDE	ND	30
75-00-3	CHLOROETHANE	ND	30
75-09-2	METHYLENE CHLORIDE	ND	50
67-64-1	ACETONE	70	50
75-15-0	CARBON DISULFIDE	ND	5
75-35-4	1,1-DICHLOROETHENE	ND	5
75-34-3	1,1-DICHLOROETHANE	ND	5
156-60-5	TRANS-1,2-DICHLOROETHENE	39	5
67-66-3	CHLOROFORM	ND	5
107-06-2	1,2-DICHLOROETHANE	ND	5
78-93-3	2-BUTANONE	ND	50
71-55-6	1,1,1-TRICHLOROETHANE	8	5
16-23-5	CARBON TETRACHLORIDE	ND	5
108-05-4	VINYL ACETATE	ND	30
75-27-4	BROMODICHLOROMETHANE	ND	5
78-87-5	1,2-DICHLOROPROPANE	ND	5
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ND	5
79-01-6	TRICHLOROETHENE	1200	5
124-48-1	DIBROMOCHLOROMETHANE	ND	5
79-00-5	1,1,2-TRICHLOROETHANE	ND	5
71-43-2	BENZENE	ND	5
10061-01-5	CIS-1,3-DICHLOROPROPENE	ND	5
110-75-8	2-CHLOROETHYL VINYL ETHER	ND	50
75-25-2	BROMOFORM	ND	5
119-78-6	2-HEXANONE	ND	30
108-10-1	4-METHYL-2-PENTANONE	70	30
127-18-4	TETRACHLOROETHENE	290	5
79-34-5	1,1,2,2 TETRACHLOROETHANE	ND	5
108-88-3	TOLUENE	ND	5
108-90-7	CHLOROBENZENE	ND	5
100-41-4	ETHYLBENZENE	ND	5
75-69-4	TRICHLOROFLUOROMETHANE	ND	5
100-42-5	STYRENE	ND	5
95-47-6	TOTAL XYLENES	ND	5
95-50-1	1,2-DICHLOROBENZENE	ND	5
541-73-1	1,3-DICHLOROBENZENE	ND	5
106-46-7	1,4-DICHLOROBENZENE	ND	5

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94119-6

DATE ANALYZED: 11/30/87

SAMPLE I.D.: 317-6331-6

REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

Compound	<u>ug/kg</u>	Detection Limit <u>ug/kg</u>
Acetone	ND	* 10
Benzene	ND	* 5.0
Butyl Acetate	ND	* 5.0
Carbon Disulfide	ND	* 5.0
Chloroform	ND	* 5.0
Decane	ND	* 5.0
Ethyl Benzene	ND	* 5.0
Methylene Chloride	ND	* 5.0
Methyl Ethyl Ketone	ND	*10.0

Compound	<u>ug/kg</u>	Detection Limit <u>ug/kg</u>
Methyl Methacrylate	ND	* 5.0
Styrene	ND	* 5.0
Tetrachloroethene	ND	* 5.0
1,1,1-Trichloroethane	ND	* 5.0
Trichloroethene	ND	* 5.0
Toluene	ND	* 5.0
Xylenes	ND	* 5.0
Undecane	ND	* 5.0

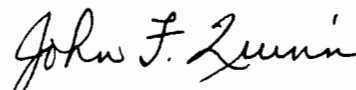
* = less than
ND = Not Detected



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1

Respectfully submitted,



John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94119-25

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-7573-1

REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

Compound	Detection		Compound	Detection	
	ug/kg	Limit ug/kg		ug/kg	Limit ug/kg
Acetone	ND	* 10	Methyl Methacrylate	ND	* 5.0
Benzene	ND	* 5.0	Styrene	ND	* 5.0
Butyl Acetate	ND	* 5.0	Tetrachloroethene	ND	* 5.0
Carbon Disulfide	ND	* 5.0	1,1,1-Trichloroethane	ND	* 5.0
Chloroform	ND	* 5.0	Trichloroethene	ND	* 5.0
Decane	ND	* 5.0	Toluene	ND	* 5.0
Ethyl Benzene	ND	* 5.0	Xylenes	ND	* 5.0
Methylene Chloride	ND	* 5.0	Undecane	ND	* 5.0
Methyl Ethyl Ketone	ND	*10.0			

* = less than

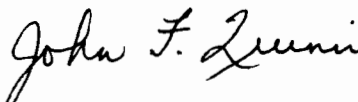
ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1



John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94119-26

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-7573-2

REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

Compound	ug/kg	Detection	Compound	ug/kg	Detection
		Limit ug/kg			Limit ug/kg
Acetone	ND	* 10	Methyl Methacrylate	ND	* 5.0
Benzene	ND	* 5.0	Styrene	ND	* 5.0
Butyl Acetate	ND	* 5.0	Tetrachloroethene	ND	* 5.0
Carbon Disulfide	ND	* 5.0	1,1,1-Trichloroethane	ND	* 5.0
Chloroform	ND	* 5.0	Trichloroethene	ND	* 5.0
Decane	ND	* 5.0	Toluene	ND	* 5.0
Ethyl Benzene	ND	* 5.0	Xylenes	ND	* 5.0
Methylene Chloride	ND	* 5.0	Undecane	ND	* 5.0
Methyl Ethyl Ketone	ND	*10.0			


* = less than

ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist



John F. Quinn, Ph.D.
Environmental Chemist

JGP/JFQ:me1

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94119-27

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 317-7573-3

REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

Compound	ug/kg	Detection Limit
		ug/kg
Acetone	ND	* 10
Benzene	ND	* 5.0
Butyl Acetate	ND	* 5.0
Carbon Disulfide	ND	* 5.0
Chloroform	ND	* 5.0
Decane	ND	* 5.0
Ethyl Benzene	ND	* 5.0
Methylene Chloride	ND	* 5.0
Methyl Ethyl Ketone	ND	*10.0

Compound	ug/kg	Detection Limit
		ug/kg
Methyl Methacrylate	ND	* 5.0
Styrene	ND	* 5.0
Tetrachloroethene	ND	* 5.0
1,1,1-Trichloroethane	ND	* 5.0
Trichloroethene	ND	* 5.0
Toluene	ND	* 5.0
Xylenes	ND	* 5.0
Undecane	ND	* 5.0

* = less than

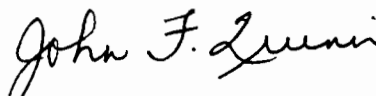
ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1



John F. Quinn, Ph.D.
Environmental Chemist



CENTRUM ANALYTICAL LABORATORIES

CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

CLIENT : Bermite Division of Whittaker
SITE : Bermite
SAMPLE : 317-7573-4
MATRIX : Soil

DATE RECEIVED: 01/06/88
DATE ANALYZED: 01/19/88
SAMPLE AMOUNT: 1.0 gms
STANDARD ID : VOA34

EPA METHOD 8240 (624)

CAS #	COMPOUND:	CONC: UG/KG (ppb)	DETECTION LIMIT:
74-87-3	CHLOROMETHANE	ND	30
74-83-9	BROMOMETHANE	ND	30
75-01-4	VINYL CHLORIDE	ND	30
75-00-3	CHLOROETHANE	ND	30
75-09-2	METHYLENE CHLORIDE	ND	50
67-64-1	ACETONE	150	50
75-15-0	CARBON DISULFIDE	ND	5
75-35-4	1,1-DICHLOROETHENE	ND	5
75-34-3	1,1-DICHLOROETHANE	ND	5
156-60-5	TRANS-1,2-DICHLOROETHENE	ND	5
67-66-3	CHLOROFORM	ND	5
107-06-2	1,2-DICHLOROETHANE	ND	5
78-93-3	2-BUTANONE	ND	50
71-55-6	1,1,1-TRICHLOROETHANE	ND	5
16-23-5	CARBON TETRACHLORIDE	ND	5
108-05-4	VINYL ACETATE	ND	30
75-27-4	BROMODICHLOROMETHANE	ND	5
78-87-5	1,2-DICHLOROPROPANE	ND	5
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ND	5
79-01-6	TRICHLOROETHENE	7	5
124-48-1	DIBROMOCHLOROMETHANE	ND	5
79-00-5	1,1,2-TRICHLOROETHANE	ND	5
71-43-2	BENZENE	ND	5
10061-01-5	CIS-1,3-DICHLOROPROPENE	ND	5
110-75-8	2-CHLOROETHYL VINYL ETHER	ND	50
75-25-2	BROMOFORM	ND	5
119-78-6	2-HEXANONE	ND	30
108-10-1	4-METHYL-2-PENTANONE	ND	30
127-18-4	TETRACHLOROETHENE	ND	5
79-34-5	1,1,2,2 TETRACHLOROETHANE	ND	5
108-88-3	TOLUENE	ND	5
108-90-7	CHLOROBENZENE	ND	5
100-41-4	ETHYLBENZENE	ND	5
75-69-4	TRICHLOROFLUOROMETHANE	ND	5
100-42-5	STYRENE	ND	5
95-47-6	TOTAL XYLENES	ND	5
95-50-1	1,2-DICHLOROBENZENE	ND	5
541-73-1	1,3-DICHLOROBENZENE	ND	5
106-46-7	1,4-DICHLOROBENZENE	ND	5

CLIENT : Bermite Division of Whittaker
 SITE : Bermite
 SAMPLE : 317-7573-5
 MATRIX : Soil

DATE RECIEVED: 01/06/88
 DATE ANALYZED: 01/15/88
 SAMPLE AMOUNT: 1.0 gms
 STANDARD ID : VOA31

EPA METHOD 8240 (624)

CAS #	COMPOUND:	CONC: UG/KG (ppb)	DETECTION LIMIT:
74-87-3	CHLOROMETHANE	ND	30
74-83-9	BROMOMETHANE	ND	30
75-01-4	VINYL CHLORIDE	ND	30
75-00-3	CHLOROETHANE	ND	30
75-09-2	METHYLENE CHLORIDE	ND	50
67-64-1	ACETONE	ND	50
75-15-0	CARBON DISULFIDE	ND	5
75-35-4	1,1-DICHLOROETHENE	ND	5
75-34-3	1,1-DICHLOROETHANE	ND	5
156-60-5	TRANS-1,2-DICHLOROETHENE	ND	5
67-66-3	CHLOROFORM	ND	5
107-06-2	1,2-DICHLOROETHANE	ND	5
78-93-3	2-BUTANONE	ND	50
71-55-6	1,1,1-TRICHLOROETHANE	ND	5
16-23-5	CARBON TETRACHLORIDE	ND	5
108-05-4	VINYL ACETATE	ND	30
75-27-4	BROMODICHLOROMETHANE	ND	5
78-87-5	1,2-DICHLOROPROPANE	ND	5
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ND	5
79-01-6	TRICHLOROETHENE	ND	5
124-48-1	DIBROMOCHLOROMETHANE	ND	5
79-00-5	1,1,2-TRICHLOROETHANE	ND	5
71-43-2	BENZENE	ND	5
10061-01-5	CIS-1,3-DICHLOROPROPENE	ND	5
110-75-8	2-CHLOROETHYL VINYL ETHER	ND	50
75-25-2	BROMOFORM	ND	5
119-78-6	2-HEXANONE	ND	30
108-10-1	4-METHYL-2-PENTANONE	ND	30
127-18-4	TETRACHLOROETHENE	ND	5
79-34-5	1,1,2,2 TETRACHLOROETHANE	ND	5
108-88-3	TOLUENE	ND	5
108-90-7	CHLOROBENZENE	ND	5
100-41-4	ETHYLBENZENE	ND	5
75-69-4	TRICHLOROFLUOROMETHANE	ND	5
100-42-5	STYRENE	ND	5
95-47-6	TOTAL XYLENES	ND	5
95-50-1	1,2-DICHLOROBENZENE	ND	5
541-73-1	1,3-DICHLOROBENZENE	ND	5
106-46-7	1,4-DICHLOROBENZENE	ND	5

CLIENT : Bermite Division of Whittaker
 SITE : Bermite
 SAMPLE : 317-7573-6
 MATRIX : Soil

DATE RECEIVED: 01/06/88
 DATE ANALYZED: 01/15/88
 SAMPLE AMOUNT: 1.0 gms
 STANDARD ID : VOA31

EPA METHOD 8240 (624)

CAS #	COMPOUND:	CONC: UG/KG (ppb)	DETECTION LIMIT:
74-87-3	CHLOROMETHANE	ND	30
74-83-9	BROMOMETHANE	ND	30
75-01-4	VINYL CHLORIDE	ND	30
75-00-3	CHLOROETHANE	ND	30
75-09-2	METHYLENE CHLORIDE	ND	50
67-64-1	ACETONE	ND	50
75-15-0	CARBON DISULFIDE	ND	5
75-35-4	1,1-DICHLOROETHENE	ND	5
75-34-3	1,1-DICHLOROETHANE	ND	5
156-60-5	TRANS-1,2-DICHLOROETHENE	ND	5
67-66-3	CHLOROFORM	ND	5
107-06-2	1,2-DICHLOROETHANE	ND	5
78-93-3	2-BUTANONE	ND	50
71-55-6	1,1,1-TRICHLOROETHANE	ND	5
16-23-5	CARBON TETRACHLORIDE	ND	5
108-05-4	VINYL ACETATE	ND	30
75-27-4	BROMODICHLOROMETHANE	ND	5
78-87-5	1,2-DICHLOROPROPANE	ND	5
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ND	5
79-01-6	TRICHLOROETHENE	ND	5
124-48-1	DIBROMOCHLOROMETHANE	ND	5
79-00-5	1,1,2-TRICHLOROETHANE	ND	5
71-43-2	BENZENE	ND	5
10061-01-5	CIS-1,3-DICHLOROPROPENE	ND	5
110-75-8	2-CHLOROETHYL VINYL ETHER	ND	50
75-25-2	BROMOFORM	ND	5
119-78-6	2-HEXANONE	ND	30
108-10-1	4-METHYL-2-PENTANONE	ND	30
127-18-4	TETRACHLOROETHENE	ND	5
79-34-5	1,1,2,2 TETRACHLOROETHANE	ND	5
108-88-3	TOLUENE	9	5
108-90-7	CHLOROBENZENE	ND	5
100-41-4	ETHYLBENZENE	ND	5
75-69-4	TRICHLOROFLUOROMETHANE	ND	5
100-42-5	STYRENE	ND	5
95-47-6	TOTAL XYLENES	41	5
95-50-1	1,2-DICHLOROBENZENE	ND	5
541-73-1	1,3-DICHLOROBENZENE	ND	5
106-46-7	1,4-DICHLOROBENZENE	ND	5

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94120

DATE ANALYZED: 11/30/87

SAMPLE I.D.: Solvent Blank

REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

Compound	ug/kg	Detection Limit ug/kg
Acetone	ND	* 10
Benzene	ND	* 5.0
Butyl Acetate	ND	* 5.0
Carbon Disulfide	ND	* 5.0
Chloroform	ND	* 5.0
Decane	ND	* 5.0
Ethyl Benzene	ND	* 5.0
Methylene Chloride	ND	* 5.0
Methyl Ethyl Ketone	ND	*10.0

Compound	ug/kg	Detection Limit ug/kg
Methyl Methacrylate	ND	* 5.0
Styrene	ND	* 5.0
Tetrachloroethene	ND	* 5.0
1,1,1-Trichloroethane	ND	* 5.0
Trichloroethene	ND	* 5.0
Toluene	ND	* 5.0
Xylenes	ND	* 5.0
Undecane	ND	* 5.0

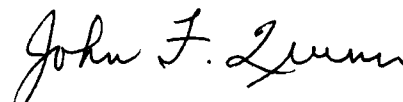
* = less than
ND = Not Detected



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1

Respectfully submitted,



John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

HAZARDOUS WASTE CHARACTERIZATION

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

REPORT OF ANALYSIS mg/kg

Date Received: December 10, 1987
Date Sampled: December 8 and 9, 1987

Description: 342-9955 -2 -4
Lab Number: 94153 -2 -4

			Detection Limit mg/kg
Antimony	ND	ND	10
Arsenic	5	6	3
Barium	ND	ND	50
Beryllium	ND	ND	0.5
Cadmium	ND	ND	0.5
Chromium (Total)	ND	ND	50
Copper	-	-	10
Fluoride	-	-	100
Lead	4	4	4
Mercury	ND	ND	0.1
Nickel	ND	ND	10
Selenium	ND	ND	0.5
Silver	ND	ND	3
Thallium	ND	ND	5
Boron	6	8	5
Magnesium	2680	2950	500

ND = Not detected at or above the
concentration of the detection limit.

FGL ENVIRONMENTAL, INC.

Paul Bredt

Paul Bredt
Environmental Chemist

PB/JQ:me1

John Quinn

John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

HAZARDOUS WASTE CHARACTERIZATION

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

REPORT OF ANALYSIS

mg/kg

Date Received: December 10, 1987
Date Sampled: December 8 and 9, 1987

Description: 342-9619 -2 -4
Lab Number: 94153 -6 -8

			Detection Limit mg/kg
Antimony	ND	ND	10
Arsenic	8	9	
Barium	ND	ND	50
Beryllium	ND	ND	0.5
Cadmium	ND	ND	0.5
Chromium (Total)	ND	ND	50
Copper	-	-	10
Fluoride	-	-	100
Lead	6	6	4
Mercury	ND	ND	0.1
Nickel	10	10	10
Selenium	ND	ND	0.5
Silver	ND	ND	3
Thallium	ND	ND	5
Boron	10	10	5
Magnesium	3590	3380	500

ND = Not detected at or above the
concentration of the detection limit.

FGL ENVIRONMENTAL, INC.

Paul Bredt
Paul Bredt
Environmental Chemist

PB/JQ:me1

John Quinn
John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

HAZARDOUS WASTE CHARACTERIZATION

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

REPORT OF ANALYSIS

mg/kg

Date Received: December 10, 1987

Date Sampled: December 8 and 9, 1987

Description: 342-2006 - 2 - 4

Lab Number: 94153 -10 -12

			Detection Limit mg/kg
Antimony	ND	ND	10
Arsenic	8	ND	
Barium	ND	ND	50
Beryllium	ND	ND	0.5
Cadmium	ND	ND	0.5
Chromium (Total)	ND	ND	50
Copper	-	-	10
Fluoride	-	-	100
Lead	4	4	4
Mercury	ND	ND	0.1
Nickel	ND	ND	10
Selenium	ND	ND	0.5
Silver	ND	ND	3
Thallium	ND	ND	5
Boron	10	ND	5
Magnesium	3080	1400	500

ND = Not detected at or above the
concentration of the detection limit.

FGL ENVIRONMENTAL, INC.

Paul Brett

Paul Brett
Environmental Chemist

PB/JQ:me1

John Quinn

John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

HAZARDOUS WASTE CHARACTERIZATION

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

REPORT OF ANALYSIS mg/kg

Date Received: December 10, 1987
Date Sampled: December 8 and 9, 1987

Description: 342-2045 - 2
Lab Number: 94153 -14

		Detection Limit mg/kg
Antimony	ND	10
Arsenic	5	
Barium	ND	50
Beryllium	ND	0.5
Cadmium	ND	0.5
Chromium (Total)	ND	50
Copper	-	10
Fluoride	-	100
Lead	4	4
Mercury	ND	0.1
Nickel	ND	10
Selenium	ND	0.5
Silver	ND	3
Thallium	ND	5
Boron	7	5
Magnesium	2660	500

ND = Not detected at or above the
concentration of the detection limit.

FGL ENVIRONMENTAL, INC.

Paul Bredt

Paul Bredt
Environmental Chemist

PB/JQ:me1

John Quinn

John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

HAZARDOUS WASTE CHARACTERIZATION

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

REPORT OF ANALYSIS mg/kg

Date Received: December 10, 1987
Date Sampled: December 8 and 9, 1987

Description: 342-1333 - 2 - 4
Lab Number: 94153 -17 -19

			Detection Limit mg/kg
Antimony	ND	ND	10
Arsenic	9	5	
Barium	67	ND	50
Beryllium	ND	ND	0.5
Cadmium	ND	ND	0.5
Chromium (Total)	ND	ND	50
Copper	-	-	10
Fluoride	-	-	100
Lead	6	4	4
Mercury	ND	ND	0.1
Nickel	ND	ND	10
Selenium	ND	ND	0.5
Silver	ND	ND	3
Thallium	ND	ND	5
Boron	11	6	5
Magnesium	3480	2080	500

ND = Not detected at or above the
concentration of the detection limit.

FGL ENVIRONMENTAL, INC.

Paul Bredt

Paul Bredt
Environmental Chemist

PB/JQ:me1

John Quinn
John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

February 12, 1988

Bermite Division of Whittaker
22115 W. Soledad Canyon Road
Saugus, CA 91350

Gentlemen:

RE: COPPER ANALYSES

Presented below are the results of the analyses performed on your two (2) samples received December 9, 1987. The samples have been described, as received, along with the data.

DATA

Sample Taken: 12/8/87
Extraction Date: 12/28/87
Analysis Completed: 2/4/88

<u>Lab. No.</u>	<u>Sample I.D.</u>	<u>Copper (mg/kg)</u>	<u>Detection Limit (mg/kg)</u>
94153-2	342-9955-2	ND	10
94153-4	342-9955-4	ND	10

ND = Not detected at or above the
concentration of the detection limit.

Very truly yours,
FGL ENVIRONMENTAL, INC.

Paul Brett
Paul Brett
Environmental Chemist

PB/JQ:cm

John Quinn
John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

February 12, 1988

Bermite Division of Whittaker
22115 W. Soledad Canyon Road
Saugus, CA 91350

Gentlemen:

RE: COPPER ANALYSES

Presented below are the results of the analyses performed on your two (2) samples received December 9, 1987. The samples have been described, as received, along with the data.

DATA

Sample Taken: 12/8/87
Extraction Date: 12/28/87
Analysis Completed: 2/4/88

<u>Lab. No.</u>	<u>Sample I.D.</u>	<u>Copper (mg/kg)</u>	<u>Detection Limit (mg/kg)</u>
94153-6	342-9619-2	ND	10
94153-8	342-9619-4	ND	10

ND = Not detected at or above the
concentration of the detection limit.

Very truly yours,
FGL ENVIRONMENTAL, INC.

Paul Bredt
Paul Bredt
Environmental Chemist

PB/JQ:cem

John Quinn
John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

February 12, 1988

Bermite Division of Whittaker
22115 W. Soledad Canyon Road
Saugus, CA 91350

Gentlemen:

RE: COPPER ANALYSES

Presented below are the results of the analyses performed on your two (2) samples received December 9, 1987. The samples have been described, as received, along with the data.

DATA

Sample Taken: 12/8/87
Extraction Date: 12/28/87
Analysis Completed: 2/4/88

<u>Lab. No.</u>	<u>Sample I.D.</u>	<u>Copper (mg/kg)</u>	<u>Detection Limit (mg/kg)</u>
94153-10	342-2006-2	ND	10
94153-12	342-2006-4	ND	10

ND = Not detected at or above the
concentration of the detection limit.

Very truly yours,
FGL ENVIRONMENTAL, INC.

Paul Bredt
Paul Bredt
Environmental Chemist

PB/JQ:cem

John Quinn
John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

February 12, 1988

Bermite Division of Whittaker
22115 W. Soledad Canyon Road
Saugus, CA 91350

Gentlemen:

RE: COPPER ANALYSIS

Presented below are the results of the analysis performed on your sample received December 9, 1987. The sample has been described, as received, along with the data.

DATA

Sample Taken: 12/8/87
Extraction Date: 12/28/87
Analysis Completed: 2/4/88

<u>Lab. No.</u>	<u>Sample I.D.</u>	<u>Copper (mg/kg)</u>	<u>Detection Limit (mg/kg)</u>
94153-14	342-2045-2	ND	10

ND = Not detected at or above the
concentration of the detection limit.

Very truly yours,
FGL ENVIRONMENTAL, INC.

Paul B. Brett
Paul Brett
Environmental Chemist

PB/JQ:cem

John Quinn
John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

February 12, 1988

Bermite Division of Whittaker
22115 W. Soledad Canyon Road
Saugus, CA 91350

Gentlemen:

RE: COPPER ANALYSES

Presented below are the results of the analyses performed on your two (2) samples received December 9, 1987. The samples have been described, as received, along with the data.

DATA

Sample Taken: 12/8/87
Extraction Date: 12/28/87
Analysis Completed: 2/4/88

<u>Lab. No.</u>	<u>Sample I.D.</u>	<u>Copper (mg/kg)</u>	<u>Detection Limit (mg/kg)</u>
94153-17	342-1333-2	ND	10
94153-19	342-1333-4	ND	10

ND = Not detected at or above the
concentration of the detection limit.

Very truly yours,
FGL ENVIRONMENTAL, INC.

Paul Bredt
Paul Bredt
Environmental Chemist

PB/JQ:cem

John Quinn
John Quinn, Ph.D.
Environmental Chemist

Client: Pioneer Consultants
Job Number: 6376
Date Analyzed: 7-14-87

Quantitative Analysis Report
Inductively Coupled Plasma-Mass Spectrometry

Parts Per Million

	#16 BH-2 40.5-41	#23 BH-5 15.5-16	#25 BH-5 20-20.5	#5 BH-6 16.5-17	#7 BH-6 20.5-21	#17 BH-6 60-60.5	Detection Limit
Chromium	9	15	12	21	10	12	0.2
Arsenic	3	3	3	5	3	2	1
Selenium	ND	ND	ND	ND	ND	ND	5
Silver	ND	ND	ND	ND	ND	ND	0.06
Cadmium	ND	ND	ND	ND	ND	ND	0.1
Barium	61	37	30	120	38	46	0.5
Mercury	ND	ND	ND	ND	ND	ND	0.2
Lead	4.7	4.3	4.2	6.9	4	3.2	0.2

Client: Pioneer Consultants
Job Number: 6376
Date Analyzed: 7-14-87

Quantitative Analysis Report
Inductively Coupled Plasma-Mass Spectrometry

Parts Per Million
mg/kg

	BH-6 68.5-69	#25 BH-7 15.5-16	#27 BH-7 20.5-21	#37 BH-8 15.5-16	#39 BH-8 20.5-21	#49 BH-9 15.5-16	Detection Limit
Chromium	11	10	21	16	14	17	0.2
Arsenic	6	3	4	4	3	5	1
Selenium	ND	14.5	ND	ND	ND	ND	5
Silver	ND	ND	ND	ND	ND	ND	0.06
Cadmium	0.5	ND	ND	ND	0.1	ND	0.1
Barium	44	21	73	36	26	51	0.5
Mercury	ND	ND	ND	ND	ND	ND	0.2
Lead	4.1	2.9	7	5.4	3.2	6.1	0.2

Client: Pioneer Consultants
Job Number: 6376
Date Analyzed: 7-14-87

Quantitative Analysis Report
Inductively Coupled Plasma-Mass Spectrometry

Parts Per Million
mg/kg

	#51 BH-9 20.5-21	#57 BH-10 5.5-6	#59 BH-10 10-10.5	#61 BH-10 11.5-12	#63 BH-10 19-19.5	#65 BH-10 28.5-29	Detection Limit
Chromium	17	14	9	11	10	11	0.2
Arsenic	4	4	3	6	5	4	1
Selenium	ND	ND	ND	ND	ND	ND	5
Silver	ND	ND	ND	0.3	ND	0.1	0.06
Cadmium	ND	0.3	ND	ND	ND	ND	0.1
Barium	40	113	15	20	77	47	0.5
Mercury	ND	ND	ND	ND	0.5	ND	0.3
Lead	4.5	3.6	2.4	2.6	6.5	3.1	0.2



CENTRUM ANALYTICAL LABORATORIES

CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

CLIENT: Bermite Division of Whittaker
SITE: Bermite

RECEIVED BY
WENCK ASSOCIATES INC.

DATE RECEIVED: 1-6-88
JOB #: 111-001

FEB 18 1988

The enclosed data results sheets are for samples that were analyzed according to EPA Methods 7060 (arsenic), 7080 (barium), 7130 (cadmium), 7190 (chromium), 7420 (lead), 7450 (magnesium), 7471 (mercury), 7741 (selenium), 7760 (silver), 212.3 (boron, colorimetric, curcumin), and 340.2 (fluoride, potentiometric, ion selective electrode). Samples were analyzed with a Perkin-Elmer 1100 atomic absorption spectrophotometer. A Perkin-Elmer MHS-10 hydride system was used for arsenic, selenium, and mercury.

All concentration values have units of ppm. Detection limits (Det Lim) are instrumental detection limits, and also have units of ppm. The concentration was reported if it was greater than or equal to the limit of detection.

Sample numbers ending in "D" indicate duplicate samples.

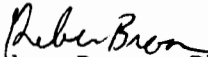
Sample numbers ending in "S" indicate spiked samples.


ND = Species was analyzed for, but not detected.

NA = Species was not analyzed for.

Respectfully submitted,

Centrum Analytical Laboratories


Reber Brown, Ph.D.
Chemist


Ida Wallace
Laboratory Supervisor

METAL CONCENTRATIONS (ppm) IN SOIL mg/kg
Page 1

Sample No.	Lead	Chromium	Cadmium	Magnesium	Barium
10737-1	8.1	14.2	ND	3810	73.0
10737-2	14.0	14.3	ND	3460	74.7
10737-3	27.4	13.3	ND	2920	68.4
10737-4	11.7	14.5	ND	3020	78.3
10737-4D	12.4	13.2	ND	3790	74.1
10737-5	21.7	13.5	ND	3040	65.1
10737-6	17.3	10.0	ND	3110	55.4
10737-7	15.2	11.8	ND	3890	68.6
10737-8	15.8	14.2	ND	2690	63.2
10737-9	8.7	22.1	ND	10100	204.0
10737-10	ND	20.2	ND	1820	28.3
10615-1	11.5	11.0	ND	3790	55.2
10615-2	21.5	8.19	ND	2840	64.6
10615-3	74.5	23.8	ND	3690	123.0
10615-4	32.5	15.0	ND	3620	77.2
10615-5	17.2	12.5	ND	3100	68.8
10615-7	41.1	11.9	ND	3040	37.0
10615-9	22.9	17.4	ND	5720	77.8
10615-9D	26.3	13.9	ND	5980	75.2
10615-10	ND	10.6	ND	3380	57.0
6833-1	22.2	16.6	ND	3660	88.8
6833-2	17.0	14.9	ND	3660	59.6
6833-3	35.2	20.7	ND	3650	83.7
6833-4	60.1	17.7	ND	3240	93.5
6833-5	7.1	13.5	ND	3520	71.0
6833-6	52.2	17.4	ND	5850	101.0
6833-7	45.9	34.1	ND	4860	168.0
6833-8	50.2	38.2	2.32	3170	158.0
6833-9	ND	6.99	ND	2520	ND
6833-10	ND	12.1	2.70	3060	53.9
6125-1	ND	12.7	ND	3720	39.4
6125-2	59.3	16.0	ND	3780	63.8
6125-4	17.7	11.3	ND	1800	28.3
6125-5	170.0	24.2	2.84	3060	39.1
6125-6	26.7	13.8	ND	2050	44.5
6125-7	ND	666.0	ND	2650	2250.0
6125-7D	ND	414.0	ND	2410	2010.0
6125-9	ND	14.6	4.85	1680	304.0
6125-10	ND	10.6	ND	3020	59.6



CENTRUM ANALYTICAL LABORATORIES

CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

METAL CONCENTRATIONS (ppm) IN SOIL mg/kg Page 2

Sample No.	Lead	Chromium	Cadmium	Magnesium	Barium
2231-1	ND	13.9	ND	4330	69.3
2231-2	ND	10.6	ND	3930	51.0
2231-3	263.0	64.1	12.7	2410	215.0
2231-4	21.5	8.17	3.01	2020	47.3
2231-5	57.1	43.9	ND	3250	259.0
2231-6	ND	11.1	ND	2180	51.2
2231-7	ND	13.0	ND	3380	40.9
2231-8	ND	15.7	ND	3860	126.0
2231-9	ND	11.3	ND	4640	48.4
2231-9D	ND	12.3	ND	4071	65.8
2231-10	ND	14.1	ND	2660	33.8
4132-2	66.4	19.1	9.54	3110	49.8
4132-3	ND	9.70	ND	4050	74.9
4132-4	ND	7.73	ND	2960	42.9
4132-5	ND	5.34	ND	2580	44.5
4132-6	ND	8.24	ND	5210	221.0
4132-7	ND	10.0	ND	4990	306.0
4132-8	8.7	6.93	ND	4200	256.0
4132-9	ND	ND	ND	2110	30.7
4132-10	ND	ND	ND	1430	31.9
5828-1	ND	14.9	ND	3950	55.9
5828-2	ND	12.6	ND	3150	54.6
5828-3	13.4	9.80	ND	3650	49.0
5828-4	12.9	10.3	ND	3690	51.5
5828-5	ND	9.09	ND	3970	41.3
5828-6	7.6	155.0	ND	2870	680.0
5828-7	ND	15.0	ND	5770	410.0
5828-8	ND	9.24	ND	3110	37.8
5828-9	ND	7.75	ND	3880	38.8
5828-9D	ND	7.50	ND	3330	33.3
5828-10	ND	9.95	ND	4730	41.5
317-1397-4	ND	6.19	ND	1930	32.8
317-1397-5	ND	8.40	ND	620	53.1
317-1397-6	ND	5.23	ND	3940	60.4
317-2092-4	ND	5.74	ND	1800	61.6
317-2092-5	ND	6.29	ND	2350	54.5
317-2029-6	ND	ND	ND	1280	66.4



CENTRUM ANALYTICAL LABORATORIES

CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

METAL CONCENTRATIONS (ppm) IN SOIL mg/kg Page 3

Sample No.	Lead	Chromium	Cadmium	Magnesium	Barium
317-3369-4	ND	ND	ND	1430	52.2
317-3369-5	ND	21.9	ND	4860	59.4
317-3369-6	ND	247.0	ND	1710	72.8
317-6089-4	ND	ND	ND	1350	69.4
317-6089-4D	ND	ND	ND	1690	66.7
317-6089-5	ND	6.76	ND	2150	31.8
317-6089-6	ND	ND	ND	2100	ND
317-7573-4	ND	7.99	ND	2740	76.1
317-7573-5	ND	6.76	ND	2190	31.8
317-7573-6	ND	5.52	ND	4080	62.9
317-0745-4	ND	ND	ND	2130	46.5
317-0745-5	ND	ND	ND	2700	35.8
317-0745-6	ND	ND	ND	2120	40.0
317-3752-4	ND	6.89	ND	2840	30.1
317-3752-5	ND	6.26	ND	3210	43.0
317-3752-6	ND	ND	ND	2050	38.7
317-3752-6D	ND	ND	ND	2610	38.8
317-6331-4	11.5	ND	ND	ND	57.4
317-6331-5	9.0	ND	ND	ND	67.2
BLANKS	0.0	0.02	0.01	0.006	0.1
(ppm of metal	0.0	0.00	0.00	0.000	0.0
in original	0.0	0.00	0.00	0.000	0.0
extract)	0.0	0.00	0.00	0.000	0.2
	0.1	0.00	0.00	0.000	0.0
	0.3	0.00	0.00	0.000	0.1
	0.3	0.00	0.00	0.000	0.1
Detection	20.0	5.00	2.00	0.16	20.0
Limit:	5.00				5.00

ND - Not Detected



CENTRUM ANALYTICAL LABORATORIES

CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

METAL CONCENTRATIONS (ppm) IN SOIL mg/kg Page 1A

Sample No.	Silver	Arsenic	Selenium	Mercury
10737-1	ND	ND	ND	ND
10737-2	ND	ND	ND	ND
10737-3	0.80	ND	ND	ND
10737-4	ND	ND	ND	ND
10737-4D	NA	ND	ND	NA
10737-5	0.80	2.00	ND	ND
10737-6	ND	ND	ND	ND
10737-7	0.41	ND	ND	ND
10737-8	ND	ND	ND	ND
10737-9	ND	ND	ND	ND
1037-10	ND	ND	ND	ND
10737-10D	NA	NA	NA	ND
10615-1	ND	ND	ND	ND
10615-2	1.23	ND	ND	ND
10615-3	2.34	ND	ND	ND
10615-4	0.40	ND	ND	ND
10615-4D	1.19	NA	NA	NA
10615-5	ND	ND	ND	ND
10615-7	ND	2.64	ND	ND
10615-7D	NA	NA	NA	ND
10615-9	ND	ND	ND	ND
10605-9D	NA	ND	ND	NA
10615-10	ND	ND	ND	ND
6833-1	ND	ND	ND	ND
6833-2	ND	2.15	ND	ND
6833-3	0.44	2.02	ND	ND
6833-4	1.34	ND	ND	ND
6833-5	ND	2.12	ND	ND
6833-6	7.38	2.72	ND	ND
6833-6D	NA	NA	NA	ND
6833-7	ND	ND	ND	ND
6833-8	0.77	ND	ND	ND
6833-9	ND	ND	ND	ND
6833-9D	ND	ND	ND	NA
6833-10	ND	ND	ND	ND
6125-1	0.44	2.12	ND	ND
6125-2	1.37	ND	ND	ND
6125-2D	NA	NA	NA	ND
6125-4	ND	ND	ND	ND



CENTRUM ANALYTICAL LABORATORIES

CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

METAL CONCENTRATIONS (ppm) IN SOIL mg/kg Page 2A

Sample No.	Silver	Arsenic	Selenium	Mercury
6125-5	2.49	2.44	ND	ND
6125-6	ND	ND	ND	ND
6125-7	ND	ND	ND	ND
6125-7D	ND	ND	ND	NA
6125-9	ND	2.08	ND	ND
6125-10	ND	ND	ND	ND
2231-1	0.43	2.56	ND	ND
2231-2	ND	2.89	ND	ND
2231-3	5.71	2.42	ND	ND
2231-4	0.86	ND	ND	ND
2231-5	0.88	4.04	ND	ND
2231-6	ND	ND	ND	ND
2231-7	ND	ND	ND	ND
2231-8	ND	ND	ND	ND
2231-9	0.40	ND	ND	ND
2231-9D	ND	ND	ND	NA
2231-10	ND	ND	ND	ND
2231-10D	NA	NA	NA	ND
4132-2	ND	ND	ND	ND
4132-3	ND	ND	ND	ND
4132-4	0.43	2.00	ND	ND
4132-5	ND	ND	ND	ND
4132-6	ND	2.00	ND	ND
4132-7	ND	2.13	ND	ND
4132-8	0.43	ND	ND	ND
4132-9	ND	ND	ND	ND
4132-9D	NA	NA	NA	ND
4132-10	ND	ND	ND	ND
4132-10D	ND	ND	ND	NA
5828-1	ND	ND	ND	ND
5828-2	0.42	ND	ND	ND
5828-3	ND	ND	ND	ND
5828-4	0.86	ND	ND	ND
5828-5	ND	ND	ND	ND
5828-6	ND	ND	ND	ND
5828-7	ND	ND	ND	ND
5828-8	ND	ND	ND	ND
5828-8D	NA	NA	NA	ND
5828-9	ND	ND	ND	ND
5828-9D	ND	ND	ND	NA
5828-10	ND	ND	ND	ND
317-1397-4	ND	ND	ND	ND
317-1397-5	ND	ND	ND	ND
317-1397-6	ND	ND	ND	ND
317-2092-4	ND	ND	ND	ND



CENTRUM ANALYTICAL LABORATORIES

CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

METAL CONCENTRATIONS (ppm) IN SOIL mg/kg Page 3A

Sample No.	Silver	Arsenic	Selenium	Mercury
317-2092-5	1.68	ND	ND	ND
317-2029-6	ND	ND	ND	ND
317-3369-4	ND	ND	ND	ND
317-3369-5	ND	ND	ND	ND
317-3369-6	ND	ND	ND	ND
317-3369-6D	NA	NA	NA	ND
317-6089-4	ND	ND	ND	ND
317-6089-4D	ND	ND	ND	NA
317-6089-5	ND	ND	ND	ND
317-6089-6	ND	2.00	ND	ND
317-7573-4	ND	ND	ND	ND
317-7573-5	0.40	ND	ND	ND
317-7573-6	ND	ND	ND	ND
317-0745-4	ND	ND	ND	ND
317-0745-5	ND	ND	ND	ND
317-0745-6	ND	ND	ND	ND
317-3752-4	0.43	ND	ND	ND
317-3752-5	ND	ND	ND	ND
317-3752-6	ND	ND	ND	ND
317-6331-4	ND	ND	ND	ND
317-6331-5	ND	ND	ND	ND
BLANKS	0.00	0.009	0.005	0.002
(ppm of metal	0.01	0.010	0.004	0.002
in original	0.01	0.009	0.004	0.001
extract for	0.00	0.010	0.005	0.002
silver,	0.01	0.008	0.006	0.002
absorbance	0.00	0.007	0.005	0.001
units for	0.01	0.008	0.005	0.001
As, Se, Hg)	0.01	0.014	0.004	0.001
	0.00	0.007	0.005	0.001
	0.00	0.012	0.004	
Detection				
Limit:	0.4	2.00	1.00	0.20

NA = Not Analyzed
ND = Not Detected

METAL CONCENTRATIONS (ppm) IN SOIL mg/kg
OC DATA REPORT
Page 1B

SELENIUM

Sample No.	5828-9	317-6089-4	6833-9	317-1397-6	317-0745-4
Dup 1 (ng)	ND	ND	ND	.443	ND
Dup 2 (ng)	ND	ND	ND	ND	ND
Amount Spiked					
Added (ng)	5.0	5.0	5.0	5.0	5.0
Theoretical					
Amount (ng)	5.0	5.0	5.0	5.43	5.0
Experimental					
Amount (ng)	4.43	4.43	4.06	4.43	4.61
% Recovery	88.5	88.5	81.2	81.4	92.2

ARSENIC

Sample No.	10615-9	10737-4	5828-9	317-6089-4	317-1397-6
Dup 1 (ng)	2.76	4.59	2.64	1.65	2.98
Dup 2 (ng)	2.76	4.13	2.31	3.31	
Amount Spiked					
Added (ng)	2.5	2.5	2.5	2.5	2.5
Theoretical					
Amount (ng)	5.26	6.86	4.98	4.98	5.48
Experimental					
Amount (ng)	5.51	7.35	4.96	4.63	5.62
% Recovery	105	107	99.6	93.0	102

MERCURY

Sample No.	10737-10	6833-6	10615-7	5828-8	317-3752-6
Dup 1 (ng)	ND	ND	ND	ND	ND
Dup 2 (ng)	ND	ND	ND	ND	ND
Amount Spiked					
Added (ng)	20	20	20	20	20
Theoretical					
Amount (ng)	20	20	20	20	20
Experimental					
Amount (ng)	20.1	20.8	20.9	21.9	22.4
% Recovery	101	109	104	110	112



CENTRUM ANALYTICAL LABORATORIES

CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

METAL CONCENTRATIONS (ppm) IN SOIL mg/kg OC DATA REPORT Page 2B

SILVER (ppm)

Sample No.	10737-5	10615-4	2231-4	5828-9	317-0745-4
Dup 1 (ng)	ND	0.01	.02	ND	ND
Dup 2 (ng)	.03	.03	.02	ND	ND
Amount Spiked					
Added	1.0	1.0	1.0	1.0	1.0
Theoretical					
Amount	1.02	1.02	1.02	1.00	1.00
Experimental					
Amount	0.89	1.12	1.03	1.01	1.10
% Recovery	87.2	110	101	99	110

LEAD (ppm)

Sample No.	10737-4	6125-7	2231-9	5828-9	317-6089-4
Dup 1 (ng)	0.3	ND	ND	ND	ND
Dup 2 (ng)	0.3	ND	ND	ND	ND
Amount Spiked					
Added	5.0	5.0	5.0	5.0	5.0
Theoretical					
Amount	5.3	5.0	5.0	5.0	5.0
Experimental					
Amount	5.2	5.1	5.0	4.5	4.4
% Recovery	98.1	102	100	90	88

CADMIMUM (ppm)

Sample No.	10615-9	6125-8	4132-10	5828-9	317-6089-4
Dup 1 (ng)	ND	.01	ND	ND	ND
Dup 2 (ng)	ND	.03	ND	ND	ND
Amount Spiked					
Added	5.0	.05	.05	.05	.05
Theoretical					
Amount	5.0	.07	.05	.05	.05
Experimental					
Amount	5.4	.08	.04	.04	.04
% Recovery	108	114	80	80	80

METAL CONCENTRATIONS (ppm) IN SOIL mg/kg
OC DATA REPORT
Page 3B

MAGNESIUM (ppm)

Sample No.	107317-4	6125-7	5828-9	2231-9	317-6089-4
Dup 1	98	60	80	115	35
Dup 2	83	55	90	99	43
Amount Spiked					
Added	5.0	5.0	5.0	5.0	5.0
Theoretical					
Amount	95.5	62.5	90	112	44
Experimental					
Amount	111	63	97	99	43
% Recovery	116	101	108	88	98

CHROMIUM (ppm)

Sample No.	10737-4	6833-9	2231-9	5828-9	317-6089-4
Dup 1	.39	0.18	0.28	0.18	0.02
Dup 2	.34	0.17	0.30	0.18	0.03
Amount Spiked					
Added	5.00	2.00	2.00	2.00	2.00
Theoretical					
Amount	5.36	2.18	2.29	2.18	2.02
Experimental					
Amount	4.80	2.02	2.17	1.87	1.69
% Recovery	89.6	92.7	94.8	85.8	83.7

BARIUM (ppm)

Sample No.	10737-4	6833-9	4132-10	5828-9	317-6089-4
Dup 1	2.1	ND	0.9	1.0	1.9
Dup 2	1.9	ND	1.0	0.9	1.8
Amount Spiked					
Added	5.0	5.0	5.0	5.0	5.0
Theoretical					
Amount	7.0	5.0	5.95	5.95	6.85
Experimental					
Amount	5.8	4.5	5.10	5.6	5.6
% Recovery	83	90	85.7	94.1	81.8

METAL CONCENTRATIONS (ppm) IN SOIL mg/kg
OC DATA REPORT
Page 4B

BORON (ppm)

Sample No.	10737-4	6125-4	2231-2	4132-2
Dup 1	.206	.082	.030	.082
Dup 2	.198	.091	.069	.055
Amount Spiked				
Added	.5	.500	.50	.50
Theoretical				
Amount	.702	.586	.550	.568
Experimental				
Amount	.605	.550	.512	.553
% Recovery	86.2	93.8	93.1	97.4

Sample Number	pH	Boron (ppm)	Fluoride (ppm)
10737-1	8.27	NA	NA
10737-2	7.50	1.51	ND
10737-3	8.03	3.46	ND
10737-4	7.66	2.02	ND
10737-5	7.78	0.82	ND
10737-6	4.62	0.69	ND
10737-7	7.94	1.16	ND
10737-8	8.28	21.30	ND
10737-9	8.78	30.00	4.6
10737-10	7.40	2.06	ND
10615-1	6.98	4.15	ND
10615-2	7.73	7.24	ND
10615-3	7.32	5.72	ND
10615-4	7.08	2.34	ND
10615-5	7.08	1.65	ND
10615-7	5.93	0.82	ND
10615-9	6.97	1.04	ND
10615-10	4.72	1.57	ND
6833-1	7.34	1.46	ND
6833-2	7.80	0.82	ND
6833-3	8.05	1.32	ND
6833-4	7.05	0.50	ND
6833-5	7.14	1.65	ND
6833-6	6.93	1.38	ND
6833-7	7.94	17.90	ND
6833-8	8.07	9.35	ND
6833-9	7.04	3.30	ND
6833-10	6.88	3.40	ND
6127-1	6.84	0.77	ND
6125-2	6.72	0.60	ND
6125-4	6.88	0.86	ND
6125-5	7.36	0.82	ND
6125-6	7.15	58.80	ND
6125-7	8.30	118.00	ND
6125-9	6.52	24.80	ND
6125-10	7.12	24.10	ND



CENTRUM ANALYTICAL LABORATORIES

CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

Sample Number	pH	Boron (ppm)	Fluoride (ppm)	Sample No.	pH
2231-1	6.74	0.41	ND	317-1397-4	7.28
2231-2	6.76	0.50	ND	317-1397-5	7.26
2231-3	8.01	3.00	ND	317-1396-6	6.66
2231-4	8.69	1.32	ND	317-2092-4	5.95
2231-5	8.41	2.61	ND	317-2092-5	6.28
2231-6	6.45	0.50	ND	317-2029-6	5.83
2231-7	7.01	ND	ND	317-3369-4	5.32
2231-8	6.99	ND	ND	317-3369-5	5.18
2231-9	6.83	0.28	ND	317-3369-6	6.57
2231-10	6.33	ND	ND	317-6089-4	5.31
4132-2	7.04	0.68	ND	317-6089-5	5.42
4132-3	7.24	1.92	ND	317-6089-6	6.80
4132-4	6.45	0.82	ND	317-7573-4	5.99
4132-5	6.63	0.88	ND	317-7573-5	6.16
4232-6	7.44	ND	ND	317-7573-6	6.20
4132-7	7.41	0.82	ND	317-0745-4	5.66
4132-8	6.62	0.25	ND	317-0745-5	5.32
4132-9	6.51	ND	ND	317-0745-6	5.35
4132-10	6.83	0.16	ND	317-3752-4	6.66
5825-1	7.42	0.55	ND	317-3752-5	6.93
5828-2	6.98	0.88	ND	317-3752-6	5.68
5828-3	7.64	1.51	ND	317-6331-4	10.15
5828-4	7.61	ND	ND	317-6331-5	10.05
5828-5	7.14	1.48	ND		
5828-6	7.67	20.40	ND		
5828-7	7.41	6.08	ND		
5828-8	7.06	3.05	ND		
5828-9	6.32	3.14	ND		
5828-10	7.44	1.87	ND		

NA = Not Analyzed

ND = Not Detected

Detection Limit: Boron 0.10 mg/kg
Fluoride 2 mg/kg

CLIENT : Bermite Division of Whittaker
SITE : Bermite

DATE RECIEVED: 01/06/88
JOB #:111-001

EPA METHOD 8270 (625)

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THE ENCLOSED DATA RESULTS SHEETS ARE FOR SAMPLES THAT WERE ANALYZED ACCORDING TO EPA METHOD 8270. THE SAMPLES WERE EXTRACTED ACCORDING TO EPA METHOD 3550, AND ANALYZED ON AN HP 5890 GC EQUIPPED WITH A HP 5790 MSD. ALSO ENCLOSED IS THE METHOD BLANK REPORT AND QC DATA FOR THE SAMPLE ANALYSIS.

THE FOLLOWING DATA REPORTING QUALIFIERS ARE USED ON THE DATA RESULTS SHEETS.


VALUE: IF THE RESULT IS A VALUE GREATER THAN OR EQUAL TO THE DETECTION LIMIT (DL), THE VALUE IS REPORTED.

ND: INDICATES THAT THE COMPOUND WAS ANALYZED FOR BUT NOT DETECTED. THE MINIMUM DL FOR THE SAMPLE WITH THE ND IS REPORTED BASED ON NECESSARY CONCENTRATION OR DILUTION ACTIONS.

TR: INDICATES AN ESTIMATED VALUE. THIS FLAG IS USED WHEN THE MASS SPECTRAL DATA INDICATES THE PRESENCE OF A COMPOUND THAT MEETS THE IDENTIFICATION CRITERIA BUT THE RESULT IS LESS THAN THE SPECIFIED DL BUT GREATER THAN ZERO.

RESPECTFULLY SUBMITTED,

CENTRUM ANALYTICAL LABORATORIES


MICHAEL A. YARTZOFF
CHEMIST


IDA WALLACE
LABORATORY SUPERVISOR



CENTRUM ANALYTICAL LABORATORIES

CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

CLIENT : Bermite Division of Whittaker
SITE : CENTRUM ANALYTICAL
SAMPLE : METHOD BLANK
SAMPLE AMOUNT: EXTRACT:1ML
MATRIX : Soil

DATE RECIEVED: 01/06/88
DATE PREPARED: 01/13/88
DATE ANALYZED: 01/24/88
STANDARD ID : BNA15

EPA METHOD 8270 (625)

=====			
CAS #	COMPOUND:	CONC: UG/KG (ppb)	DETECTION LIMIT:

112-34-5	BUTYL CARBITOL	ND	30
102-06-7	DIPHENYL GUANIDINE	ND	30
106-51-4	QUINONE	ND	30
122-39-4	DIPHENYLAMINE	ND	30
84-74-2	DI-N-BUTYL PHTHALATE	35	30



CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

MATRIX SPIKE (MS AND MSD)
% RECOVERY AND RPD SUMMARY
LABORATORY: CENTRUM ANALYTICAL
METHOD: EPA 8270 (625)

DATE RECIEVED:01/06/88
DATE ANALYZED:01/26/88
SAMPLE ID :BERMITE, BA 5828-9

UNITS: UG/KG (PPB)
MATRIX:SOIL
SAMPLE AMOUNT:30 GMS

COMPOUND:	CONC SPIKED:	CONC SAMPLE:	CONC MS:	% REC MS:	CONC MSD:	% REC MSD:	RPD:
-----	-----	-----	----	-----	-----	-----	-----
ACENAPHTHENE:	6700	ND	7100	106	7600	113	6
PYRENE:	6700	ND	7800	116	8800	131	12
1, 4-DICHLOROBENZENE:	6700	ND	7400	110	6700	100	10
PHENOL:	13300	ND	3500	26	3400	26	0
4-CHLORO-3-METHYLPHENOL:	13300	ND	11400	86	8300	62	32

$$\% \text{ REC} = (\text{CONC MATRIX SPIKE} - \text{CONC SAMPLE}) / (\text{CONC SPIKED}) * 100$$

$$\text{RPD} = (\text{MS} - \text{MSD}) / ((\text{MS} + \text{MSD}) / 2) * 100$$

R. JVERY: 3 OUT OF 10 OUTSIDE QC LIMITS
RPD: 0 OUT OF 5 OUTSIDE QC LIMITS

SOIL QUALITY CONTROL LIMITS:	RECOVERY:	RPD:
	-----	----
ACENAPHTHENE:	46-118	31
PYRENE:	26-127	31
1, 4-DICHLOROBENZENE:	36-97	28
PHENOL:	12-89	42
4-CHLORO-3-METHYLPHENOL:	23-97	42



CENTRUM ANALYTICAL LABORATORIES

CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

CLIENT : Bermite Division of Whittaker
SITE : Bermite
SAMPLE : BA 10615-10
SAMPLE AMOUNT: 30G:1ML
MATRIX : Soil

DATE RECIEVED: 01/06/88
DATE PREPARED: 01/13/88
DATE ANALYZED: 01/24/88
STANDARD ID : BNA15

EPA METHOD 8270 (625)

CAS #	COMPOUND:	CONC: UG/KG (ppb)	DETECTION LIMIT:
112-34-5	BUTYL CARBITOL	ND	30
102-06-7	DIPHENYL GUANIDINE	ND	30
106-51-4	QUINONE	ND	30
122-39-4	DIPHENYLAMINE	ND	30
84-74-2	DI-N-BUTYL PHTHALATE	ND	30



CENTRUM ANALYTICAL LABORATORIES

CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

CLIENT : Bermite Division of Whittaker
SITE : Bermite
SAMPLE : BA 5828-9
SAMPLE AMOUNT: 30G:1ML
MATRIX : Soil

DATE RECIEVED: 01/06/88
DATE PREPARED: 01/13/88
DATE ANALYZED: 01/24/88

STANDARD ID : BNA15

EPA METHOD 8270 (625)

=====			
CAS #	COMPOUND:	CONC: UG/KG (ppb)	DETECTION LIMIT:

112-34-5	BUTYL CARBITOL	ND	30
102-06-7	DIPHENYL GUANIDINE	ND	30
106-51-4	QUINONE	ND	30
122-39-4	DIPHENYLAMINE	ND	30
84-74-2	DI-N-BUTYL PHTHALATE	ND	30



CENTRUM ANALYTICAL LABORATORIES

CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

CLIENT : Bermite Division of Whittaker
SITE : Bermite
SAMPLE : BA 10737-3
SAMPLE AMOUNT: 30G:1ML
MATRIX : Soil

DATE RECIEVED: 01/06/88
DATE PREPARED: 01/13/88
DATE ANALYZED: 01/25/88

STANDARD ID : BNA16

EPA METHOD 8270 (625)

CAS #	COMPOUND:	CONC: UG/KG (ppb)	DETECTION LIMIT:
112-34-5	BUTYL CARBITOL	ND	30
102-06-7	DIPHENYL GUANIDINE	ND	30
106-51-4	QUINONE	ND	30
122-39-4	DIPHENYLAMINE	ND	30
84-74-2	DI-N-BUTYL PHTHALATE	ND	30



CENTRUM ANALYTICAL LABORATORIES

CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

CLIENT : Bermite Division of Whittaker
SITE : Bermite
SAMPLE : BA 4132-7
SAMPLE AMOUNT: 30G:1ML
MATRIX : Soil

DATE RECIEVED: 01/06/88
DATE PREPARED: 01/13/88
DATE ANALYZED: 01/25/88

STANDARD ID : BNA16

EPA METHOD 8270 (625)

CAS #	COMPOUND:	CONC: UG/KG (ppb)	DETECTION LIMIT:
112-34-5	BUTYL CARBITOL	ND	30
102-06-7	DIPHENYL GUANIDINE	ND	30
106-51-4	QUINONE	ND	30
122-39-4	DIPHENYLAMINE	ND	30
84-74-2	DI-N-BUTYL PHTHALATE	ND	30



CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

CLIENT : Bermite Division of Whittaker
SITE : Bermite
SAMPLE : BA 5828-1
SAMPLE AMOUNT: 30G:1ML
MATRIX : Soil

DATE RECIEVED: 01/06/88
DATE PREPARED: 01/13/88
DATE ANALYZED: 01/25/88

STANDARD ID : BNA16

EPA METHOD 8270 (625)

=====			
CAS #	COMPOUND:	CONC: UG/KG (ppb)	DETECTION LIMIT:

112-34-5	BUTYL CARBITOL	ND	30
102-06-7	DIPHENYL GUANIDINE	ND	30
106-51-4	QUINONE	ND	30
122-39-4	DIPHENYLAMINE	ND	30
84-74-2	DI-N-BUTYL PHTHALATE	ND	30

CLIENT : Bermite Division of Whittaker DATE RECIEVED: 01/06/88
SITE : Bermite DATE PREPARED: 01/13/88
SAMPLE : BA 10737-7 DATE ANALYZED: 01/25/88
SAMPLE AMOUNT: 30G:1ML
MATRIX : Soil STANDARD ID : BNA16

EPA METHOD 8270 (625)

CAS #	COMPOUND:	CONC: UG/KG (ppb)	DETECTION LIMIT:
112-34-5	BUTYL CARBITOL	ND	30
102-06-7	DIPHENYL GUANIDINE	ND	30
106-51-4	QUINONE	ND	30
122-39-4	DIPHENYLAMINE	ND	30
84-74-2	DI-N-BUTYL PHTHALATE	ND	30



CENTRUM ANALYTICAL LABORATORIES

CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

CLIENT : Bermite Division of Whittaker
SITE : Bermite
SAMPLE : BA 10737-9
SAMPLE AMOUNT: 30G:1ML
MATRIX : Soil

DATE RECIEVED: 01/06/88
DATE PREPARED: 01/13/88
DATE ANALYZED: 01/25/88

STANDARD ID : BNA16

EPA METHOD 8270 (625)

CAS #	COMPOUND:	CONC: UG/KG (ppb)	DETECTION LIMIT:
112-34-5	BUTYL CARBITOL	ND	30
102-06-7	DIPHENYL GUANIDINE	ND	30
106-51-4	QUINONE	ND	30
122-39-4	DIPHENYLAMINE	ND	30
84-74-2	DI-N-BUTYL PHTHALATE	ND	30



CENTRUM ANALYTICAL LABORATORIES

CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

CLIENT : Bermite Division of Whittaker
SITE : Bermite
SAMPLE : BA 4132-6
SAMPLE AMOUNT: 30G:1ML
MATRIX : Soil

DATE RECIEVED: 01/06/88
DATE PREPARED: 01/13/88
DATE ANALYZED: 01/25/88
STANDARD ID : BNA16

EPA METHOD 8270 (625)

CAS #	COMPOUND:	CONC: UG/KG (ppb)	DETECTION LIMIT:
112-34-5	BUTYL CARBITOL	ND	30
102-06-7	DIPHENYL GUANIDINE	ND	30
106-51-4	QUINONE	ND	30
122-39-4	DIPHENYLAMINE	ND	30
84-74-2	DI-N-BUTYL PHTHALATE	ND	30

CLIENT : Bermite Division of Whittaker

DATE RECIEVED: 01/06/88

SITE : Bermite

DATE PREPARED: 01/13/88

SAMPLE : BA 2231-3

DATE ANALYZED: 01/25/88

SAMPLE AMOUNT: 30G:1ML

MATRIX : Soil

STANDARD ID : BNA16

EPA METHOD 8270 (625)

CAS #	COMPOUND:	CONC: UG/KG (ppb)	DETECTION LIMIT:
112-34-5	BUTYL CARBITOL	ND	30
102-06-7	DIPHENYL GUANIDINE	ND	30
106-51-4	QUINONE	ND	30
122-39-4	DIPHENYLAMINE	ND	30
84-74-2	DI-N-BUTYL PHTHALATE	ND	30



CENTRUM ANALYTICAL LABORATORIES

CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

CLIENT : Bermite Division of Whittaker
SITE : Bermite
SAMPLE : BA 5828-5
SAMPLE AMOUNT: 30G:1ml
MATRIX : Soil

DATE RECIEVED: 01/06/88
DATE PREPARED: 01/13/88
DATE ANALYZED: 01/26/88

STANDARD ID : BNA16

EPA METHOD 8270 (625)

CAS #	COMPOUND:	CONC: UG/KG (ppb)	DETECTION LIMIT:
112-34-5	BUTYL CARBITOL	ND	30
102-06-7	DIPHENYL GUANIDINE	ND	30
106-51-4	QUINONE	ND	30
122-39-4	DIPHENYLAMINE	ND	30
84-74-2	DI-N-BUTYL PHTHALATE	ND	30

CLIENT : Bermite Division of Whittaker
SITE : Bermite
SAMPLE : BA 6125-5
SAMPLE AMOUNT: 30G:1ml
MATRIX : Soil

DATE RECIEVED: 01/06/88
DATE PREPARED: 01/13/88
DATE ANALYZED: 01/26/88

STANDARD ID : BNA16

EPA METHOD 8270 (625)

=====			
CAS #	COMPOUND:	CONC: UG/KG (ppb)	DETECTION LIMIT:

112-34-5	BUTYL CARBITOL	ND	30
102-06-7	DIPHENYL GUANIDINE	ND	30
106-51-4	QUINONE	ND	30
122-39-4	DIPHENYLAMINE	ND	30
84-74-2	DI-N-BUTYL PHTHALATE	ND	30



CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

CLIENT : Bermite Division of Whittaker
SITE : Bermite
SAMPLE : BA 6125-9
SAMPLE AMOUNT: 30G:1ml
MATRIX : Soil

DATE RECIEVED: 01/06/88
DATE PREPARED: 01/13/88
DATE ANALYZED: 01/26/88
STANDARD ID : BNA16

EPA METHOD 8270 (625)

CAS #	COMPOUND:	CONC: UG/KG (ppb)	DETECTION LIMIT:
112-34-5	BUTYL CARBITOL	ND	30
102-06-7	DIPHENYL GUANIDINE	ND	30
106-51-4	QUINONE	ND	30
122-39-4	DIPHENYLAMINE	ND	30
84-74-2	DI-N-BUTYL PHTHALATE	ND	30



CENTRUM ANALYTICAL LABORATORIES

CERTIFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

CLIENT : Bermite Division of Whittaker
SITE : Bermite
SAMPLE : BA 2231-10
SAMPLE AMOUNT: 30G:1ml
MATRIX : Soil

DATE RECIEVED: 01/06/88
DATE PREPARED: 01/13/88
DATE ANALYZED: 01/26/88
STANDARD ID : BNA16

EPA METHOD 8270 (625)

CAS #	COMPOUND:	CONC: UG/KG (ppb)	DETECTION LIMIT:
112-34-5	BUTYL CARBITOL	ND	30
102-06-7	DIPHENYL GUANIDINE	ND	30
106-51-4	QUINONE	ND	30
122-39-4	DIPHENYLAMINE	ND	30
84-74-2	DI-N-BUTYL PHTHALATE	ND	30

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 01/18/88

DATE RECEIVED: N/A

DATE SAMPLED: N/A

LAB NO.: N/A

DATE ANALYZED: 01/08/88

SAMPLE I.D.: Sample Blank

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
in Soil (EPA 8270)

<u>Compound</u>	<u>Concentration</u> <u>mg/kg</u>	<u>Detection Limit</u> <u>mg/kg</u>
Butyl Carbitol	ND	*1
Dibutyl Phthalate	ND	*1
Diphenylamine	ND	*1
Diphenyl Guanadine	ND	*1
Quinone	ND	*1

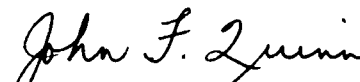
* = less than
ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1



John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 01/18/88

DATE RECEIVED: N/A

DATE SAMPLED: N/A

LAB NO.: N/A

DATE ANALYZED: 01/13/88

SAMPLE I.D.: Sample Blank

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
in Soil (EPA 8270)

<u>Compound</u>	<u>Concentration</u> <u>mg/kg</u>	<u>Detection Limit</u> <u>mg/kg</u>
Butyl Carbitol	ND	*1
Dibutyl Phthalate	ND	*1
Diphenylamine	ND	*1
Diphenyl Guanadine	ND	*1
Quinone	ND	*1

* = less than
ND = Not Detected

Respectfully submitted,

JG Patel

J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1

John F. Quinn

John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

HAZARDOUS WASTE CHARACTERIZATION

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

REPORT OF ANALYSIS

mg/kg

Date Reported: February 11, 1988
Date Received: December 15, 1987
Date Sampled: December 15, 1987

Description: BCPR-11038 -1 -2 -3 -4
Lab Number: 94167 -1 -2 -3 -4

Detection
Limit
mg/kg

Antimony	ND	ND	ND	ND
Arsenic	3	3	ND	8
Barium	75	70	50	620
Beryllium	ND	ND	ND	ND
Cadmium	ND	ND	ND	1.4
Chromium (Total)	ND	ND	ND	ND
Copper	ND	10	10	28
Fluoride	250	250	250	250
Lead	8	8	4	82
Mercury	ND	ND	ND	ND
Nickel	ND	ND	ND	14
Selenium	ND	ND	ND	ND
Silver	ND	ND	ND	ND
Thallium	ND	ND	ND	ND
Boron	9	6	ND	9
Magnesium	1670	1870	1400	3600

10
3
50
0.5
0.5
50
10
100
4
0.1
10
0.5
3
5
5
500

ND = Not detected at or above the
concentration of the detection limit.

FGL ENVIRONMENTAL, INC.

Paul Bredt

Paul Bredt
Environmental Chemist

PB/JQ:me1

John Quinn

John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

HAZARDOUS WASTE CHARACTERIZATION

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

REPORT OF ANALYSIS

mg/kg

Date Reported: February 11, 1988
Date Received: December 15, 1987
Date Sampled: December 15, 1987

Description: BCPR-11543 -1 -2 -3 -4
Lab Number: 94167 -5 -6 -7 -8

Detection
Limit
mg/kg

Antimony	ND	ND	ND	ND
Arsenic	4	3	5	5
Barium	65	55	60	55
Beryllium	ND	ND	ND	ND
Cadmium	0.5	ND	0.6	ND
Chromium (Total)	ND	ND	ND	ND
Copper	12	ND	40	ND
Fluoride	200	250	300	250
Lead	12	4	30	4
Mercury	ND	ND	ND	ND
Nickel	ND	ND	ND	ND
Selenium	ND	ND	ND	ND
Silver	ND	ND	ND	ND
Thallium	ND	ND	ND	ND
Boron	15	12	5	7
Magnesium	1620	1790	1630	2060

10
3
50
0.5
0.5
50
10
100
4
0.1
10
0.5
3
5
5
500

ND = Not detected at or above the
concentration of the detection limit.

FGL ENVIRONMENTAL, INC.

Paul Bredt

Paul Bredt
Environmental Chemist

PB/JQ:me1

John Quinn

John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

HAZARDOUS WASTE CHARACTERIZATION

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

REPORT OF ANALYSIS

mg/kg

Date Reported: February 11, 1988

Date Received: December 15, 1987

Date Sampled: December 15, 1987

Description: BCPR-10617 -1 -2 -3 -4
Lab Number: 94167 -9 -10 -11 -12

Detection
Limit
mg/kg

Antimony	ND	ND	ND	ND	10
Arsenic	4	ND	3	4	3
Barium	55	50	ND	ND	50
Beryllium	ND	ND	ND	ND	0.5
Cadmium	ND	ND	ND	ND	0.5
Chromium (Total)	ND	ND	ND	ND	50
Copper	10	ND	ND	10	10
Fluoride	250	350	250	250	100
Lead	8	8	4	4	4
Mercury	ND	ND	ND	ND	0.1
Nickel	ND	ND	ND	ND	10
Selenium	ND	ND	ND	ND	0.5
Silver	ND	ND	ND	ND	3
Thallium	ND	ND	ND	ND	5
Boron	7	ND	ND	ND	5
Magnesium	1800	1440	1440	1300	500

ND = Not detected at or above the
concentration of the detection limit.

FGL ENVIRONMENTAL, INC.

Paul Brett

Paul Brett
Environmental Chemist

PB/JQ:me1

John Quinn

John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

HAZARDOUS WASTE CHARACTERIZATION

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

REPORT OF ANALYSIS mg/kg

Date Reported: February 11, 1988
Date Received: December 15, 1987
Date Sampled: December 15, 1987

Description: BCPR-8113 -1 -2 -3 -4
Lab Number: 94167 -13 -14 -15 -16

					Detection Limit mg/kg
Antimony	ND	ND	ND	ND	10
Arsenic	4	4	4	6	3
Barium	ND	75	60	ND	50
Beryllium	ND	ND	ND	ND	0.5
Cadmium	ND	ND	4.6	ND	0.5
Chromium (Total)	ND	ND	ND	ND	50
Copper	10	ND	20	ND	10
Fluoride	400	200	ND	400	100
Lead	8	6	14	4	4
Mercury	ND	ND	ND	ND	0.1
Nickel	ND	ND	10	ND	10
Selenium	ND	ND	ND	ND	0.5
Silver	ND	ND	ND	ND	3
Thallium	ND	ND	ND	ND	5
Boron	5	ND	42	6	5
Magnesium	1600	200	1730	1630	500

ND = Not detected at or above the
concentration of the detection limit.

FGL ENVIRONMENTAL, INC.

Paul Brett
Paul Brett
Environmental Chemist

PB/JQ:me1

John Quinn
John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

HAZARDOUS WASTE CHARACTERIZATION

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

REPORT OF ANALYSIS

mg/kg

Date Reported: February 11, 1988
Date Received: December 15, 1987
Date Sampled: December 15, 1987

Description: BCPR-6036 -1 -2 -3 -4
Lab Number: 94167 -17 -18 -19 -20

Detection
Limit
mg/kg

Antimony	ND	ND	ND	ND	10
Arsenic	5	5	4	5	3
Barium	80	60	65	70	50
Beryllium	ND	ND	ND	ND	0.5
Cadmium	1	ND	1	ND	0.5
Chromium (Total)	ND	ND	ND	ND	50
Copper	32	10	22	ND	10
Fluoride	350	350	350	250	100
Lead	24	6	18	6	4
Mercury	ND	ND	ND	ND	0.1
Nickel	ND	ND	ND	ND	10
Selenium	ND	ND	ND	ND	0.5
Silver	ND	ND	ND	ND	3
Thallium	ND	ND	ND	ND	5
Boron	9	7	5	7	5
Magnesium	1970	1960	1670	1900	500

ND = Not detected at or above the
concentration of the detection limit.

FGL ENVIRONMENTAL, INC.

Paul Brett

Paul Brett
Environmental Chemist

PB/JQ:mel

John Quinn

John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

HAZARDOUS WASTE CHARACTERIZATION

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

REPORT OF ANALYSIS

mg/kg

Date Reported: February 11, 1988
Date Received: December 15, 1987
Date Sampled: December 15, 1987

Description: BCPR-5729 -1 -2 -3 -4
Lab Number: 94167 -21 -22 -23 -24

Detection
Limit
mg/kg

Antimony	ND	ND	ND	ND	10
Arsenic	7	4	4	5	3
Barium	90	65	70	500	50
Beryllium	ND	ND	ND	ND	0.5
Cadmium	0.5	ND	0.8	1	0.5
Chromium (Total)	ND	ND	ND	ND	50
Copper	14	12	24	42	10
Fluoride	550	300	250	200	100
Lead	10	8	26	110	4
Mercury	ND	ND	ND	ND	0.1
Nickel	ND	ND	ND	ND	10
Selenium	ND	ND	ND	ND	0.5
Silver	ND	ND	ND	ND	3
Thallium	ND	ND	ND	ND	5
Boron	10	ND	ND	7.0	5
Magnesium	2580	1900	1740	2000	500

ND = Not detected at or above the
concentration of the detection limit.

FGL ENVIRONMENTAL, INC.

Paul Bredt

Paul Bredt
Environmental Chemist

PB/JQ:me1

John Quinn
John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

HAZARDOUS WASTE CHARACTERIZATION

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

REPORT OF ANALYSIS

mg/kg

Date Reported: February 11, 1988
Date Received: December 15, 1987
Date Sampled: December 15, 1987

Description: BCPR-3219 -1 -2 -3 -4
Lab Number: 94167 -25 -26 -27 -28

Detection
Limit
mg/kg

Antimony	ND	ND	ND	ND	10
Arsenic	6	6	6	7	3
Barium	70	65	80	100	50
Beryllium	ND	ND	ND	ND	0.5
Cadmium	0.7	1	1.2	1.2	0.5
Chromium (Total)	ND	ND	ND	ND	50
Copper	38	42	76	82	10
Fluoride	250	300	350	300	100
Lead	42	26	54	62	4
Mercury	ND	ND	ND	ND	0.1
Nickel	10	ND	ND	10	10
Selenium	ND	ND	ND	ND	0.5
Silver	ND	ND	ND	ND	3
Thallium	ND	ND	ND	ND	5
Boron	15	14	8	8	5
Magnesium	2300	2110	2380	2190	500

ND = Not detected at or above the
concentration of the detection limit.

FGL ENVIRONMENTAL, INC.

Paul Brett

Paul Brett
Environmental Chemist

PB/JQ:me1

John Quinn

John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

HAZARDOUS WASTE CHARACTERIZATION

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

REPORT OF ANALYSIS

mg/kg

Date Reported: February 11, 1988
Date Received: December 15, 1987
Date Sampled: December 15, 1987

Description: BCPR-2138 -1 -2 -3
Lab Number: 94167 -29 -30 -31

Detection
Limit
mg/kg

Antimony	ND	ND	ND	10
Arsenic	5	5	8	3
Barium	65	70	90	50
Beryllium	ND	ND	ND	0.5
Cadmium	0.5	ND	1.0	0.5
Chromium (Total)	ND	ND	ND	50
Copper	14	10	68	10
Fluoride	250	350	300	100
Lead	14	10	40	4
Mercury	ND	ND	ND	0.1
Nickel	ND	ND	10	10
Selenium	ND	ND	ND	0.5
Silver	ND	ND	ND	3
Thallium	ND	ND	ND	5
Boron	8	6	10	5
Magnesium	1860	1930	2330	500

ND = Not detected at or above the
concentration of the detection limit.

FGL ENVIRONMENTAL, INC.

Paul Brett
Paul Brett
Environmental Chemist

PB/JQ:mel

John Quinn
John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

HAZARDOUS WASTE CHARACTERIZATION

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

REPORT OF ANALYSIS

mg/kg

Date Reported: February 11, 1988
Date Received: December 15, 1987
Date Sampled: December 15, 1987

Description: BCPR-2416 -1 -2 -3 -4
Lab Number: 94167 -32 -33 -34 -35

Detection
Limit
mg/kg

Antimony	ND	ND	ND	ND	10
Arsenic	6	6	6	7	3
Barium	55	50	60	50	50
Beryllium	ND	ND	ND	ND	0.5
Cadmium	ND	ND	0.8	ND	0.5
Chromium (Total)	ND	ND	ND	ND	50
Copper	12	ND	68	10	10
Fluoride	300	350	400	250	100
Lead	10	54	28	6	4
Mercury	ND	ND	ND	ND	0.1
Nickel	ND	ND	ND	ND	10
Selenium	ND	ND	ND	ND	0.5
Silver	ND	ND	ND	ND	3
Thallium	ND	ND	ND	ND	5
Boron	13	14	8	8	5
Magnesium	2310	2340	1990	2320	500

ND = Not detected at or above the
concentration of the detection limit.

FGL ENVIRONMENTAL, INC.

Paul Bredt

Paul Bredt
Environmental Chemist

PB/JQ:me1

John Quinn
John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

HAZARDOUS WASTE CHARACTERIZATION

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

REPORT OF ANALYSIS

mg/kg

Date Reported: February 11, 1988

Date Received: December 15, 1987

Date Sampled: December 15, 1987

Description: BCPR-3103 -1 -2 -3 -4
Lab Number: 94167 -36 -37 -38 -39

Detection
Limit
mg/kg

Antimony	ND	ND	ND	ND	10
Arsenic	5	6	9	7	3
Barium	ND	ND	75	60	50
Beryllium	ND	ND	ND	ND	0.5
Cadmium	ND	ND	ND	ND	0.5
Chromium (Total)	ND	ND	ND	ND	50
Copper	ND	ND	12	10	10
Fluoride	350	100	ND	ND	100
Lead	4	4	4	8	4
Mercury	ND	ND	ND	ND	0.1
Nickel	ND	ND	ND	ND	10
Selenium	ND	ND	ND	ND	0.5
Silver	ND	ND	ND	ND	3
Thallium	ND	ND	ND	ND	5
Boron	8	7	9	7	5
Magnesium	2260	2660	2410	2200	500

ND = Not detected at or above the
concentration of the detection limit.

FGL ENVIRONMENTAL, INC.

Paul Bredt

Paul Bredt
Environmental Chemist

PB/JQ:me1

John Quinn
John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

HAZARDOUS WASTE CHARACTERIZATION

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

REPORT OF ANALYSIS

mg/kg

Date Reported: February 11, 1988

Date Received: December 15, 1987

Date Sampled: December 15, 1987

Description: BCPR-1706 -1 -2 -3 -4
Lab Number: 94167 -40 -41 -42 -43

Detection
Limit
mg/kg

Antimony	ND	ND	ND	ND	10
Arsenic	4	ND	ND	ND	3
Barium	95	ND	ND	70	50
Beryllium	ND	ND	ND	ND	0.5
Cadmium	ND	ND	ND	ND	0.5
Chromium (Total)	ND	ND	ND	ND	50
Copper	19	ND	ND	12	10
Fluoride	300	300	350	250	100
Lead	7	4	4	14	4
Mercury	ND	ND	ND	ND	0.1
Nickel	ND	ND	ND	ND	10
Selenium	ND	ND	ND	ND	0.5
Silver	ND	ND	ND	ND	3
Thallium	ND	ND	ND	ND	5
Boron	57	18	4	3	5
Magnesium	2280	1770	1820	1660	500

ND = Not detected at or above the
concentration of the detection limit.

FGL ENVIRONMENTAL, INC.

Paul Brett

Paul Brett
Environmental Chemist

PB/JQ:me1

John Quinn
John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

HAZARDOUS WASTE CHARACTERIZATION

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

REPORT OF ANALYSIS

mg/kg

Date Reported: February 11, 1988
Date Received: December 15, 1987
Date Sampled: December 15, 1987

Description: BCPR-0925 -1 -2 -3 -4
Lab Number: 94167 -44 -45 -46 -47

Detection
Limit
mg/kg

Antimony	ND	ND	ND	ND	10
Arsenic	3	4	4	4	3
Barium	100	60	60	85	50
Beryllium	ND	ND	ND	ND	0.5
Cadmium	ND	6	ND	ND	0.5
Chromium (Total)	ND	ND	ND	ND	50
Copper	10	18	14	10	10
Fluoride	400	350	250	250	100
Lead	6	16	10	22	4
Mercury	ND	ND	ND	ND	0.1
Nickel	ND	ND	ND	ND	10
Selenium	ND	ND	ND	ND	0.5
Silver	ND	ND	ND	ND	3
Thallium	ND	ND	ND	ND	5
Boron	30	11	6	4	5
Magnesium	2280	1660	1640	1810	500

ND = Not detected at or above the
concentration of the detection limit.

FGL ENVIRONMENTAL, INC.

Paul Brett
Paul Brett
Environmental Chemist

PB/JQ:me1

John Quinn
John Quinn, Ph.D.
Environmental Chemist

FGI ENVIRONMENTAL

ANALYTICAL CHEMISTS

January 18, 1988
Lab No.: 94153, 94166 and 94167

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

RE: SOIL ANALYSES - pH

Gentlemen:

Attached are the results of analyses performed on your one hundred and eight (108) soil samples received on December 9 and 16, 1987. The samples have been described, as received, along with the data.

If you have any questions, please call or write.

Very truly yours,
FRUIT GROWERS LABORATORY, INC.



John Quinn, Ph.D
Environmental Chemist

JQ:mel

TEST RESULTS

<u>Lab No.</u>	<u>Description</u>	<u>pH</u>
94153-2	342-9955-2	7.8
94153-4	342-9955-4	6.5
94153-6	342-9619-2	8.3
94153-8	342-9619-4	7.4
94153-10	342-2006-2	8.0
94153-12	342-2006-4	7.1
94153-14	342-2045-2	8.1
94153-17	342-1333-2	7.4
94153-19	342-1333-4	7.1
94153-20	EFA-6633-1	8.7
94153-21	EFA-6633-2	8.7
94153-22	EFA-6633-3	8.6
94153-23	EFA-6633-4	8.9
94153-24	EFA-6633-5	8.6
94153-25	EFA-6633-6	8.4
94153-26	EFA-6633-7	8.3
94153-27	EFA-6633-8	8.4
94153-28	EFA-6633-9	8.6
94153-29	EFA-5714-2	8.6
94153-30	EFA-5714-3	9.1
94153-31	EFA-5714-4	8.8
94153-32	EFA-5714-5	8.4
94153-33	EFA-5714-6	8.7
94153-34	EFA-5714-7	8.4
94153-35	EFA-5714-8	8.3
94153-36	EFA-5714-9	8.2
94153-37	EFA-3709-1	8.4
94153-38	EFA-3709-2	8.7
94153-39	EFA-3709-3	8.8
94153-40	EFA-3709-4	8.6
94153-41	EFA-3709-6	8.6
94153-42	EFA-3709-7	8.5
94153-43	EFA-3709-8	8.6
94153-44	EFA-3709-9	8.2

FGL ENVIRONMENTAL, INC.

By John Quinn
John Quinn, Ph.D.
Environmental Chemist

JQ:mel

TEST RESULTS

<u>Lab No.</u>	<u>Description</u>	<u>pH</u>
94153-45	EFA-2220-1	8.6
94153-46	EFA-2220-2	8.7
94153-47	EFA-2220-3	9.0
94153-48	EFA-2220-4	8.3
94153-49	EFA-2220-5	8.2
94153-50	EFA-2220-6	8.5
94153-51	EFA-2220-7	8.6
94153-52	EFA-2220-8	8.6
94153-53	EFA-2220-9	8.4
94166-1	EFA-1511-1	8.7
94166-2	EFA-1511-2	9.0
94166-3	EFA-1511-3	9.0
94166-4	EFA-1511-4	9.0
94166-5	EFA-1511-5	9.5
94166-6	EFA-1511-6	9.7
94166-7	EFA-1511-7	9.4
94166-8	EFA-1511-8	9.3
94166-9	EFA-1511-9	9.4
94166-10	EFA-0240-1	9.0
94166-11	EFA-0240-2	9.2
94166-12	EFA-0240-3	9.8
94166-13	EFA-0240-4	9.9
94166-14	EFA-0240-5	10.0
94166-15	EFA-0240-6	9.9
94166-16	EFA-0240-7	10.0
94166-17	EFA-0240-8	9.9
94166-18	EFA-0240-9	10.0
94167-1	BCPR-11038-1	8.5
94167-2	BCPR-11038-2	8.7
94167-3	BCPR-11038-3	8.6
94167-4	BCPR-11038-4	8.5
94167-5	BCPR-11543-1	8.6
94167-6	BCPR-11543-2	8.7
94167-7	BCPR-11543-3	8.6
94167-8	BCPR-11543-4	8.5
94167-9	BCPR-10617-1	8.5
94167-10	BCPR-10617-2	8.2
94167-11	BCPR-10617-3	7.9
94167-12	BCPR-10617-4	7.8

FGL ENVIRONMENTAL, INC.

By John Quinn
John Quinn, Ph.D.
Environmental Chemist

JQ:me1

TEST RESULTS

<u>Lab No.</u>	<u>Description</u>	<u>pH</u>
94167-13	BCPR-8113-1	7.5
94167-14	BCPR-8113-2	7.4
94167-15	BCPR-8113-3	7.8
94167-16	BCPR-8113-4	7.4
94167-17	BCPR-6036-1	8.3
94167-18	BCPR-6036-2	8.5
94167-19	BCPR-6036-3	8.3
94167-20	BCPR-6036-4	8.4
94167-21	BCPR-5729-1	8.2
94167-22	BCPR-5729-2	8.0
94167-23	BCPR-5729-3	8.5
94167-24	BCPR-5729-4	8.0
94167-25	BCPR-3219-1	8.0
94167-26	BCPR-3219-2	7.9
94167-27	BCPR-3219-3	7.9
94167-28	BCPR-3219-4	7.9
94167-29	BCPR-2138-1	8.3
94167-30	BCPR-2138-2	8.2
94167-31	BCPR-2138-4	8.3
94167-32	BCPR-2416-1	8.0
94167-33	BCPR-2416-2	8.2
94167-34	BCPR-2416-3	7.8
94167-35	BCPR-2416-4	7.9
94167-36	BCPR-3103-1	8.4
94167-37	BCPR-3103-2	8.4
94167-38	BCPR-3103-3	8.4
94167-39	BCPR-3103-4	8.0
94167-40	BCPR-1706-1	8.5
94167-41	BCPR-1706-2	8.3
94167-42	BCPR-1706-3	8.1
94167-43	BCPR-1706-4	8.2
94167-44	BCPR-0925-1	8.6
94167-45	BCPR-0925-2	8.0
94167-46	BCPR-0925-3	8.0
94167-47	BCPR-0925-4	7.8

FGL ENVIRONMENTAL, INC.

By John Quinn
John Quinn, Ph.D.
Environmental Chemist

JQ:me1

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 01/18/88

DATE RECEIVED: N/A

DATE SAMPLED: N/A

LAB NO.: N/A

DATE ANALYZED: 01/08/88

SAMPLE I.D.: Sample Blank

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
in Soil (EPA 8270)

<u>Compound</u>	<u>Concentration</u> <u>mg/kg</u>	<u>Detection Limit</u> <u>mg/kg</u>
Butyl Carbitol	ND	*1
Dibutyl Phthalate	ND	*1
Diphenylamine	ND	*1
Diphenyl Guanadine	ND	*1
Quinone	ND	*1

* = less than

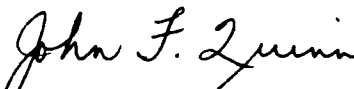
ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:mel



John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 01/18/88

DATE RECEIVED: N/A

DATE SAMPLED: N/A

LAB NO.: N/A

DATE ANALYZED: 01/13/88

SAMPLE I.D.: Sample Blank

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
in Soil (EPA 8270)

<u>Compound</u>	<u>Concentration</u> <u>mg/kg</u>	<u>Detection Limit</u> <u>mg/kg</u>
Butyl Carbitol	ND	*1
Dibutyl Phthalate	ND	*1
Diphenylamine	ND	*1
Diphenyl Guanadine	ND	*1
Quinone	ND	*1

* = less than
ND = Not Detected

Respectfully submitted,

JG Patel

J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1

John F. Quinn

John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 01/18/88

DATE RECEIVED: 12/16/87

DATE SAMPLED: 12/15/87

LAB NO.: 94167-37 Duplicate

DATE ANALYZED: 01/13/88

SAMPLE I.D.: BCPR-3103-2

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
in Soil (EPA 8270)

<u>Compound</u>	<u>Concentration</u> <u>mg/kg</u>	<u>Detection Limit</u> <u>mg/kg</u>
Butyl Carbitol	ND	*1
Dibutyl Phthalate	ND	*1
Diphenylamine	ND	*1
Diphenyl Guanadine	ND	*1
Quinone	ND	*1

* = less than
ND = Not Detected

Respectfully submitted,

JG Patel

J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1

John F. Quinn

John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 01/18/88

DATE RECEIVED: 12/16/87

DATE SAMPLED: 12/15/87

LAB NO.: 94167-16 Spike

DATE ANALYZED: 01/13/88

SAMPLE I.D.: BCPR-8113-4

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
in Soil (EPA 8270)

<u>Compound</u>	<u>Percent Recovery</u>
Butyl Carbitol	80
Dibutyl Phthal	88
Diphenylamine	68
Diphenyl Guanad	58
Quinone	59

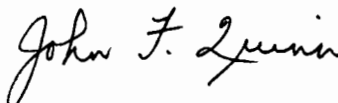
* = less than
ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1



John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 01/18/88

DATE RECEIVED: 12/16/87

DATE SAMPLED: 12/15/87

LAB NO.: 94167-9

DATE ANALYZED: 01/11/88

SAMPLE I.D.: BCPR-10617-1

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
in Soil (EPA 8270)

<u>Compound</u>	<u>Concentration</u> <u>mg/kg</u>	<u>Detection Limit</u> <u>mg/kg</u>
Butyl Carbitol	ND	*1
Dibutyl Phthalate	ND	*1
Diphenylamine	ND	*1
Diphenyl Guanadine	ND	*1
Quinone	ND	*1

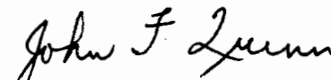
* = less than
ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1



John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 01/18/88

DATE RECEIVED: 12/16/87

DATE SAMPLED: 12/15/87

LAB NO.: 94167-11

DATE ANALYZED: 01/11/88

SAMPLE I.D.: BCPR-10612-3

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
in Soil (EPA 8270)

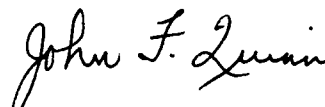
<u>Compound</u>	<u>Concentration</u> <u>mg/kg</u>	<u>Detection Limit</u> <u>mg/kg</u>
Butyl Carbitol	ND	*1
Dibutyl Phthalate	ND	*1
Diphenylamine	ND	*1
Diphenyl Guanadine	ND	*1
Quinone	ND	*1

* = less than
ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist



John F. Quinn, Ph.D.
Environmental Chemist

JGP/JFQ:me1

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 01/18/88

DATE RECEIVED: 12/16/87

DATE SAMPLED: 12/15/87

LAB NO.: 94167-16

DATE ANALYZED: 01/11/88

SAMPLE I.D.: BCPR-8113-4

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
in Soil (EPA 8270)

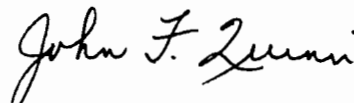
<u>Compound</u>	<u>Concentration</u> <u>mg/kg</u>	<u>Detection Limit</u> <u>mg/kg</u>
Butyl Carbitol	ND	*1
Dibutyl Phthalate	ND	*1
Diphenylamine	ND	*1
Diphenyl Guanadine	ND	*1
Quinone	ND	*1

* = less than
ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist



John F. Quinn, Ph.D.
Environmental Chemist

JGP/JFQ:me1

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 01/18/88

DATE RECEIVED: 12/16/87

DATE SAMPLED: 12/15/87

LAB NO.: 94167-18

DATE ANALYZED: 01/11/88

SAMPLE I.D.: BCPR-6036-2

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
in Soil (EPA 8270)

<u>Compound</u>	<u>Concentration</u> <u>mg/kg</u>	<u>Detection Limit</u> <u>mg/kg</u>
Butyl Carbitol	ND	*1
Dibutyl Phthalate	ND	*1
Diphenylamine	ND	*1
Diphenyl Guanadine	ND	*1
Quinone	ND	*1

* = less than
ND = Not Detected

Respectfully submitted,

JG Patel

J. G. Patel, M.S.
Environmental Chemist

John F. Quinn

John F. Quinn, Ph.D.
Environmental Chemist

JGP/JFQ:me1

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 01/18/88

DATE RECEIVED: 12/16/87

DATE SAMPLED: 12/15/87

LAB NO.: 94167-25

DATE ANALYZED: 01/11/88

SAMPLE I.D.: BCPR-3219-1

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
in Soil (EPA 8270)

<u>Compound</u>	<u>Concentration</u> <u>mg/kg</u>	<u>Detection Limit</u> <u>mg/kg</u>
Butyl Carbitol	ND	*1
Dibutyl Phthalate	ND	*1
Diphenylamine	ND	*1
Diphenyl Guanadine	ND	*1
Quinone	ND	*1

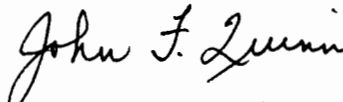
* = less than
ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1



John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 01/18/88

DATE RECEIVED: 12/16/87

DATE SAMPLED: 12/15/87

LAB NO.: 94167-34

DATE ANALYZED: 01/13/88

SAMPLE I.D.: BCPR-2416-3

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
in Soil (EPA 8270)

<u>Compound</u>	<u>Concentration</u> <u>mg/kg</u>	<u>Detection Limit</u> <u>mg/kg</u>
Butyl Carbitol	ND	*1
Dibutyl Phthalate	ND	*1
Diphenylamine	ND	*1
Diphenyl Guanadine	ND	*1
Quinone	ND	*1

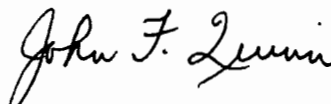
* = less than
ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1



John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 01/18/88

DATE RECEIVED: 12/16/87

DATE SAMPLED: 12/15/87

LAB NO.: 94167-37

DATE ANALYZED: 01/13/88

SAMPLE I.D.: BCPR-3103-2

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
in Soil (EPA 8270)

<u>Compound</u>	<u>Concentration</u> <u>mg/kg</u>	<u>Detection Limit</u> <u>mg/kg</u>
Butyl Carbitol	ND	*1
Dibutyl Phthalate	ND	*1
Diphenylamine	ND	*1
Diphenyl Guanadine	ND	*1
Quinone	ND	*1

* = less than

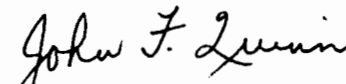
ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1



John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 01/18/88

DATE RECEIVED: 12/16/87

DATE SAMPLED: 12/15/87

LAB NO.: 94167-38

DATE ANALYZED: 01/13/88

SAMPLE I.D.: BCPR-3103-3

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
in Soil (EPA 8270)

<u>Compound</u>	<u>Concentration</u> <u>mg/kg</u>	<u>Detection Limit</u> <u>mg/kg</u>
Butyl Carbitol	ND	*1
Dibutyl Phthalate	ND	*1
Diphenylamine	ND	*1
Diphenyl Guanadine	ND	*1
Quinone	ND	*1

* = less than
ND = Not Detected

Respectfully submitted,

JG Patel

J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1

John F. Quinn

John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 01/18/88

DATE RECEIVED: 12/16/87

DATE SAMPLED: 12/15/87

LAB NO.: 94167-43

DATE ANALYZED: 01/13/88

SAMPLE I.D.: BCPR-1706-4

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
in Soil (EPA 8270)

<u>Compound</u>	<u>Concentration</u> <u>mg/kg</u>	<u>Detection Limit</u> <u>mg/kg</u>
Butyl Carbitol	ND	*1
Dibutyl Phthalate	ND	*1
Diphenylamine	ND	*1
Diphenyl Guanadine	ND	*1
Quinone	ND	*1

* = less than
ND = Not Detected

Respectfully submitted,

JG Patel

J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1

John F. Quinn

John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

HAZARDOUS WASTE CHARACTERIZATION

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

REPORT OF ANALYSIS

mg/kg

Date Received: December 10, 1987

Date Sampled: December 8 and 9, 1987

Description: EFA-6633 - 1 - 2 - 3 - 4 - 5 - 6
Lab Number: 94153 -20 -21 -22 -23 -24 -25

Detection
Limit
mg/kg

Antimony	ND	ND	ND	ND	ND	ND	10
Arsenic	5	5	10	5	5	8	3
Barium	ND	ND	ND	ND	ND	ND	50
Beryllium	ND	ND	ND	ND	ND	ND	0.5
Cadmium	0.8	4	ND	ND	ND	ND	0.5
Chromium (Total)	ND	ND	ND	ND	ND	ND	50
Copper	ND	ND	ND	ND	ND	ND	10
Fluoride	300	200	300	250	400	300	100
Lead	6	20	58	6	110	6	4
Mercury	ND	ND	ND	ND	ND	ND	0.1
Nickel	ND	ND	10	ND	ND	ND	10
Selenium	ND	ND	ND	ND	ND	ND	0.5
Silver	ND	ND	ND	ND	ND	ND	3
Thallium	ND	ND	ND	ND	ND	ND	5
Boron	6	6	10	7	6	8	5
Magnesium	2110	2030	3100	2060	2090	2550	500

ND = Not detected at or above the
concentration of the detection limit.

FGL ENVIRONMENTAL, INC.

Paul Brett

Paul Brett
Environmental Chemist

PB/JQ:mel

John Quinn

John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

HAZARDOUS WASTE CHARACTERIZATION

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

REPORT OF ANALYSIS mg/kg

Date Received: December 10, 1987
Date Sampled: December 8 and 9, 1987

Description: EFA-6633 - 7 - 8 - 9
Lab Number: 94153 -26 -27 -28

				Detection Limit <u>mg/kg</u>
Antimony	ND	ND	ND	10
Arsenic	7	7	9	3
Barium	ND	ND	ND	50
Beryllium	ND	ND	ND	0.5
Cadmium	ND	ND	ND	0.5
Chromium (Total)	ND	ND	ND	50
Copper	ND	ND	ND	10
Fluoride	300	300	500	100
Lead	4	6	6	4
Mercury	ND	ND	ND	0.1
Nickel	ND	ND	ND	10
Selenium	ND	ND	ND	0.5
Silver	ND	ND	ND	3
Thallium	ND	ND	ND	5
Boron	7	7	8	5
Magnesium	2520	2230	2840	500

ND = Not detected at or above the
concentration of the detection limit.

FGL ENVIRONMENTAL, INC.

Paul Brett

Paul Brett
Environmental Chemist

PB/JQ:mel

John Quinn

John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

HAZARDOUS WASTE CHARACTERIZATION

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

REPORT OF ANALYSIS

mg/kg

Date Reported: February 11, 1988

Date Received: December 15, 1987

Date Sampled: December 15, 1987

Description: EFA-1511	-1	-2	-3	-4	-5	-6
Lab Number: 94166	-1	-2	-3	-4	-5	-6

Detection
Limit
mg/kg

Antimony	ND	ND	ND	ND	ND	ND	10
Arsenic	5	4	5	5	ND	ND	3
Barium	ND	ND	ND	ND	ND	ND	50
Beryllium	ND	ND	ND	ND	ND	ND	0.5
Cadmium	4.2	7.2	4.4	ND	ND	ND	0.5
Chromium (Total)	ND	ND	ND	ND	ND	ND	50
Copper	ND	ND	ND	ND	ND	ND	10
Fluoride	250	150	150	250	ND	ND	100
Lead	14	10	10	6	4	4	4
Mercury	ND	ND	ND	ND	ND	ND	0.1
Nickel	ND	ND	ND	ND	ND	ND	10
Selenium	ND	ND	ND	ND	ND	ND	0.5
Silver	ND	ND	ND	ND	ND	ND	3
Thallium	ND	ND	ND	ND	ND	ND	5
Boron	5	ND	5	ND	ND	ND	5
Magnesium	2030	1680	1900	2040	1280	1290	500

ND = Not detected at or above the
concentration of the detection limit.

FGL ENVIRONMENTAL, INC.

Paul Brett

Paul Brett
Environmental Chemist

PB/JQ:mel

John Quinn

John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

HAZARDOUS WASTE CHARACTERIZATION

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

REPORT OF ANALYSIS

mg/kg

Date Reported: February 11, 1988
Date Received: December 15, 1987
Date Sampled: December 15, 1987

Description: EFA-1511 -7 -8 -9
Lab Number: 94166 -7 -8 -9

Detection
Limit
mg/kg

Antimony	ND	ND	ND	10
Arsenic	4	6	6	3
Barium	ND	ND	ND	50
Beryllium	ND	ND	ND	0.5
Cadmium	ND	ND	ND	0.5
Chromium (Total)	ND	ND	ND	50
Copper	ND	ND	12	10
Fluoride	300	300	300	100
Lead	6	8	6	4
Mercury	ND	ND	ND	0.1
Nickel	ND	ND	ND	10
Selenium	ND	ND	ND	0.5
Silver	ND	ND	ND	3
Thallium	ND	ND	ND	5
Boron	ND	6	6	5
Magnesium	1520	1490	2720	500

ND = Not detected at or above the
concentration of the detection limit.

FGL ENVIRONMENTAL, INC.

Paul Bredt
Paul Bredt
Environmental Chemist

PB/JQ:me1

John Quinn
John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

HAZARDOUS WASTE CHARACTERIZATION

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

REPORT OF ANALYSIS

mg/kg

Date Received: December 10, 1987

Date Sampled: December 8 and 9, 1987

Description: EFA-5714 - 2 - 3 - 4 - 5 - 6
Lab Number: 94153 -29 -30 -31 -32 -33

						Detection Limit mg/kg
Antimony	ND	ND	ND	ND	ND	10
Arsenic	7	5	ND	3	3	3
Barium	ND	ND	ND	ND	ND	50
Beryllium	ND	ND	ND	ND	ND	0.5
Cadmium	4	4	2	0.5	0.5	0.5
Chromium (Total)	ND	ND	ND	ND	ND	50
Copper	ND	ND	ND	ND	ND	10
Fluoride	ND	ND	350	250	250	100
Lead	22	22	8	6	6	4
Mercury	ND	ND	ND	ND	ND	0.1
Nickel	ND	ND	ND	ND	ND	10
Selenium	ND	ND	ND	ND	ND	0.5
Silver	ND	ND	ND	ND	ND	3
Thallium	ND	ND	ND	ND	ND	5
Boron	8	9	4	4	4	5
Magnesium	2620	1890	1060	1450	1580	500

ND = Not detected at or above the
concentration of the detection limit.

FGL ENVIRONMENTAL, INC.

Paul Brett

Paul Brett
Environmental Chemist

PB/JQ:mel

John Quinn

John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

HAZARDOUS WASTE CHARACTERIZATION

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

REPORT OF ANALYSIS

mg/kg

Date Received: December 10, 1987

Date Sampled: December 8 and 9, 1987

Description: EFA-5714 - 7 - 8 - 9
Lab Number: 94153 -34 -35 -36

				Detection Limit mg/kg
Antimony	ND	ND	ND	10
Arsenic	5	6	8	3
Barium	ND	ND	50	50
Beryllium	ND	ND	ND	0.5
Cadmium	0.5	ND	ND	0.5
Chromium (Total)	ND	ND	ND	50
Copper	ND	ND	ND	10
Fluoride	350	550	300	100
Lead	6	6	6	4
Mercury	ND	ND	ND	0.1
Nickel	ND	ND	ND	10
Selenium	ND	ND	ND	0.5
Silver	ND	ND	ND	3
Thallium	ND	ND	ND	5
Boron	5	6	6	5
Magnesium	1860	2330	2360	500

ND = Not detected at or above the
concentration of the detection limit.

FGL ENVIRONMENTAL, INC.

Paul B redt

Paul Bredt
Environmental Chemist

PB/JQ:mel

John Quinn

John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

HAZARDOUS WASTE CHARACTERIZATION

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

REPORT OF ANALYSIS

mg/kg

Date Received: December 10, 1987

Date Sampled: December 8 and 9, 1987

Description: EFA-3709 - 1 - 2 - 3 - 4 - 5
Lab Number: 94153 -37 -38 -39 -40 94120-3

						Detection Limit mg/kg
Antimony	ND	ND	ND	ND		10
Arsenic	4	3	4	8		3
Barium	ND	ND	ND	60		50
Beryllium	ND	ND	ND	ND		0.5
Cadmium	6	4	6	ND		0.5
Chromium (Total)	ND	ND	ND	ND		50
Copper	ND	ND	ND	ND	ND	10
Fluoride	350	400	300	300		100
Lead	14	12	6	6		4
Mercury	ND	ND	ND	ND		0.1
Nickel	ND	ND	ND	10		10
Selenium	ND	ND	ND	ND		0.5
Silver	ND	ND	ND	ND		3
Thallium	ND	ND	ND	ND		5
Boron	5	ND	5	5		5
Magnesium	1750	1390	1850	2850		500

ND = Not detected at or above the
concentration of the detection limit.

FGL ENVIRONMENTAL, INC.

Paul Brett

Paul Brett
Environmental Chemist

PB/JQ:me1

John Quinn

John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

HAZARDOUS WASTE CHARACTERIZATION

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

REPORT OF ANALYSIS

mg/kg

Date Received: December 10, 1987

Date Sampled: December 8 and 9, 1987

Description: EFA-3709 - 6 - 7 - 8 - 9
Lab Number: 94153 -41 -42 -43 -44

					Detection Limit mg/kg
Antimony	ND	ND	ND	ND	10
Arsenic	6	8	ND	10	3
Barium	ND	ND	ND	78	50
Beryllium	ND	ND	ND	0.5	0.5
Cadmium	ND	ND	ND	ND	0.5
Chromium (Total)	ND	ND	ND	ND	50
Copper	ND	ND	ND	ND	10
Fluoride	250	300	250	350	100
Lead	6	6	4	8	4
Mercury	ND	ND	ND	ND	0.1
Nickel	ND	ND	ND	12	10
Selenium	ND	ND	ND	ND	0.5
Silver	ND	ND	ND	ND	3
Thallium	ND	ND	ND	ND	5
Boron	6	8	ND	13	5
Magnesium	2200	2560	1060	3980	500

ND = Not detected at or above the
concentration of the detection limit.

FGL ENVIRONMENTAL, INC.

Paul Brett

Paul Brett
Environmental Chemist

PB/JQ:me1

John Quinn
John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

HAZARDOUS WASTE CHARACTERIZATION

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

REPORT OF ANALYSIS

mg/kg

Date Received: December 10, 1987

Date Sampled: December 8 and 9, 1987

Description: EFA-2220 - 1 - 2 - 3 - 4 - 5
Lab Number: 94153 -45 -46 -47 -48 -49

						Detection Limit mg/kg
Antimony	ND	ND	ND	ND	ND	10
Arsenic	5	3	ND	3	4	3
Barium	ND	ND	ND	ND	ND	50
Beryllium	ND	ND	ND	ND	ND	0.5
Cadmium	8	6	26	0.8	72	0.5
Chromium (Total)	ND	ND	ND	ND	ND	50
Copper	ND	ND	ND	ND	ND	10
Fluoride	250	ND	250	400	500	100
Lead	20	16	8	4	6	4
Mercury	ND	ND	ND	ND	ND	0.1
Nickel	ND	ND	ND	ND	ND	10
Selenium	ND	ND	ND	ND	ND	0.5
Silver	ND	ND	ND	ND	ND	3
Thallium	ND	ND	ND	ND	ND	5
Boron	4	4	4	3	5	5
Magnesium	1720	1510	1270	1530	1960	500

ND = Not detected at or above the
concentration of the detection limit.

FGL ENVIRONMENTAL, INC.

Paul Brett

Paul Brett
Environmental Chemist

PB/JQ:me1

John Quinn
John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

HAZARDOUS WASTE CHARACTERIZATION

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

REPORT OF ANALYSIS mg/kg

Date Received: December 10, 1987
Date Sampled: December 8 and 9, 1987

Description: EFA-2220 - 6 - 7 - 8 - 9
Lab Number: 94153 -50 -51 -52 -53

					Detection Limit mg/kg
Antimony	ND	ND	ND	ND	10
Arsenic	4	ND	ND	4	3
Barium	ND	ND	ND	ND	50
Beryllium	ND	ND	ND	ND	0.5
Cadmium	ND	ND	ND	ND	0.5
Chromium (Total)	ND	ND	ND	ND	50
Copper	ND	ND	ND	ND	10
Fluoride	600	600	350	550	100
Lead	6	26	4	6	4
Mercury	ND	ND	ND	ND	0.1
Nickel	ND	ND	ND	ND	10
Selenium	ND	ND	ND	ND	0.5
Silver	ND	ND	ND	ND	3
Thallium	ND	ND	ND	ND	5
Boron	4	3	ND	4	5
Magnesium	1550	1260	540	1480	500

ND = Not detected at or above the
concentration of the detection limit.

FGL ENVIRONMENTAL, INC.

Paul Brett
Paul Brett
Environmental Chemist

PB/JQ:mel

John Quinn
John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

HAZARDOUS WASTE CHARACTERIZATION

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

REPORT OF ANALYSIS mg/kg

Date Reported: February 11, 1988
Date Received: December 15, 1987
Date Sampled: December 15, 1987

Description: EFA-0240 -1 -2 -3 -4 -5 -6
Lab Number: 94166 -10 -11 -12 -13 -14 -15

Detection
Limit
mg/kg

Antimony	ND	ND	ND	ND	ND	ND	10
Arsenic	4	4	5	ND	3	3	3
Barium	ND	ND	ND	ND	ND	ND	50
Beryllium	ND	ND	ND	ND	ND	ND	0.5
Cadmium	2.2	ND	ND	ND	ND	ND	0.5
Chromium (Total)	ND	ND	ND	ND	ND	ND	50
Copper	ND	ND	ND	ND	ND	10	10
Fluoride	250	200	200	350	350	400	100
Lead	12	6	4	4	4	ND	4
Mercury	ND	ND	ND	ND	ND	ND	0.1
Nickel	ND	ND	ND	ND	ND	ND	10
Selenium	ND	ND	ND	ND	ND	ND	0.5
Silver	ND	ND	ND	ND	ND	ND	3
Thallium	ND	ND	ND	ND	ND	ND	5
Boron	ND	ND	ND	ND	ND	ND	5
Magnesium	2400	1800	1570	1970	1530	1470	500

ND = Not detected at or above the
concentration of the detection limit.

FGL ENVIRONMENTAL, INC.

Paul Brett

Paul Brett
Environmental Chemist

PB/JQ:me1

John Quinn

John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

HAZARDOUS WASTE CHARACTERIZATION

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

REPORT OF ANALYSIS

mg/kg

Date Reported: February 11, 1988
Date Received: December 15, 1987
Date Sampled: December 15, 1987

Description: EFA-0240 -7 -8 -9
Lab Number: 94166 -16 -17 -19

Detection
Limit
mg/kg

Antimony	ND	ND	ND	10
Arsenic	ND	4	5	3
Barium	ND	ND	ND	50
Beryllium	ND	ND	ND	0.5
Cadmium	ND	ND	ND	0.5
Chromium (Total)	ND	ND	ND	50
Copper	ND	16	ND	10
Fluoride	ND	150	200	100
Lead	ND	ND	4	4
Mercury	ND	ND	ND	0.1
Nickel	ND	ND	ND	10
Selenium	ND	ND	ND	0.5
Silver	ND	ND	ND	3
Thallium	ND	ND	ND	5
Boron	ND	ND	6	5
Magnesium	1180	1500	2070	500

ND = Not detected at or above the
concentration of the detection limit.

FGL ENVIRONMENTAL, INC.

Paul Brett
Paul Brett
Environmental Chemist

PB/JQ:me1

John Quinn
John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 01/18/88

DATE RECEIVED: 12/09/87

DATE SAMPLED: 12/08/87

LAB NO.: 94153-20 Spike

DATE ANALYZED: 01/08/88

SAMPLE I.D.: EFA-6633-1

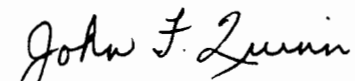
Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
in Soil (EPA 8270)

<u>Compound</u>	<u>Percent Recovery</u>
Butyl Carbitol	73
Dibutyl Phthal	100
Diphenylamine	70
Diphenyl Guanad	66
Quinone	54

* = less than
ND = Not Detected

Respectfully submitted,


J. G. Patel, M.S.
Environmental Chemist


John F. Quinn, Ph.D.
Environmental Chemist

JGP/JFQ:me1

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 01/18/88

DATE RECEIVED: 12/09/87

DATE SAMPLED: 12/08/87

LAB NO.: 94153-24 Duplicate

DATE ANALYZED: 01/08/88

SAMPLE I.D.: EFA-6633-5

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
in Soil (EPA 8270)

<u>Compound</u>	<u>Concentration</u> <u>mg/kg</u>	<u>Detection Limit</u> <u>mg/kg</u>
Butyl Carbitol	ND	*1
Dibutyl Phthalate	ND	*1
Diphenylamine	ND	*1
Diphenyl Guanadine	ND	*1
Quinone	ND	*1

* = less than

ND = Not Detected

Respectfully submitted,

JG Patel

J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1

John F. Quinn

John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 01/18/88

DATE RECEIVED: 12/09/87

DATE SAMPLED: 12/08/87

LAB NO.: 94153-20

DATE ANALYZED: 01/08/88

SAMPLE I.D.: EFA-6633-1

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
in Soil (EPA 8270)

<u>Compound</u>	<u>Concentration</u> <u>mg/kg</u>	<u>Detection Limit</u> <u>mg/kg</u>
Butyl Carbitol	ND	*1
Dibutyl Phthalate	ND	*1
Diphenylamine	ND	*1
Diphenyl Guanadine	ND	*1
Quinone	ND	*1

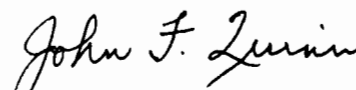
* = less than
ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1



John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 01/18/88

DATE RECEIVED: 12/09/87

DATE SAMPLED: 12/08/87

LAB NO.: 94153-24

DATE ANALYZED: 01/08/88

SAMPLE I.D.: EFA-6633-5

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
in Soil (EPA 8270)

<u>Compound</u>	<u>Concentration</u> <u>mg/kg</u>	<u>Detection Limit</u> <u>mg/kg</u>
Butyl Carbitol	ND	*1
Dibutyl Phthalate	ND	*1
Diphenylamine	ND	*1
Diphenyl Guanadine	ND	*1
Quinone	ND	*1

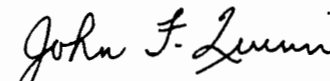
* = less than
ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1



John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 01/18/88

DATE RECEIVED: 12/09/87

DATE SAMPLED: 12/08/87

LAB NO.: 94153-27

DATE ANALYZED: 01/08/88

SAMPLE I.D.: EFA-6633-8

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
in Soil (EPA 8270)

<u>Compound</u>	<u>Concentration</u> <u>mg/kg</u>	<u>Detection Limit</u> <u>mg/kg</u>
Butyl Carbitol	ND	*1
Dibutyl Phthalate	ND	*1
Diphenylamine	ND	*1
Diphenyl Guanadine	ND	*1
Quinone	ND	*1

* = less than
ND = Not Detected

Respectfully submitted,

JG Patel

J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1

John F. Quinn

John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 01/18/88

DATE RECEIVED: 12/09/87

DATE SAMPLED: 12/08/87

LAB NO.: 94153-30

DATE ANALYZED: 01/08/88

SAMPLE I.D.: EFA-5714-3

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
in Soil (EPA 8270)

<u>Compound</u>	<u>Concentration</u> <u>mg/kg</u>	<u>Detection Limit</u> <u>mg/kg</u>
Butyl Carbitol	ND	*1
Dibutyl Phthalate	ND	*1
Diphenylamine	ND	*1
Diphenyl Guanadine	ND	*1
Quinone	ND	*1

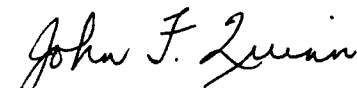
* = less than
ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1



John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 01/18/88

DATE RECEIVED: 12/09/87

DATE SAMPLED: 12/08/87

LAB NO.: 94153-45

DATE ANALYZED: 01/08/88


SAMPLE I.D.: EFA-2220-1

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
in Soil (EPA 8270)

<u>Compound</u>	<u>Concentration</u> <u>mg/kg</u>	<u>Detection Limit</u> <u>mg/kg</u>
Butyl Carbitol	ND	*1
Dibutyl Phthalate	ND	*1
Diphenylamine	ND	*1
Diphenyl Guanadine	ND	*1
Quinone	ND	*1

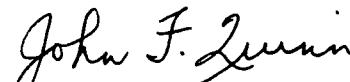
* = less than
ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1



John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 01/18/88

DATE RECEIVED: 12/09/87

DATE SAMPLED: 12/08/87

LAB NO.: 94153-50

DATE ANALYZED: 01/08/88

SAMPLE I.D.: EFA-2220-6

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
in Soil (EPA 8270)

<u>Compound</u>	<u>Concentration</u> <u>mg/kg</u>	<u>Detection Limit</u> <u>mg/kg</u>
Butyl Carbitol	ND	*1
Dibutyl Phthalate	ND	*1
Diphenylamine	ND	*1
Diphenyl Guanadine	ND	*1
Quinone	ND	*1

* = less than

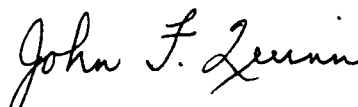
ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1



John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 01/18/88

DATE RECEIVED: 12/09/87

DATE SAMPLED: 12/08/87

LAB NO.: 94153-53

DATE ANALYZED: 01/08/88

SAMPLE I.D.: EFA-2220-9

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
in Soil (EPA 8270)

<u>Compound</u>	<u>Concentration</u> <u>mg/kg</u>	<u>Detection Limit</u> <u>mg/kg</u>
Butyl Carbitol	ND	*1
Dibutyl Phthalate	ND	*1
Diphenylamine	ND	*1
Diphenyl Guanadine	ND	*1
Quinone	ND	*1

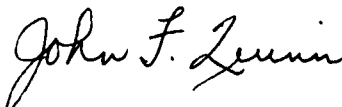
* = less than

ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist



John F. Quinn, Ph.D.
Environmental Chemist

JGP/JFQ:me1

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 01/18/88

DATE RECEIVED: 12/16/87

DATE SAMPLED: 12/15/87

LAB NO.: 94166-5

DATE ANALYZED: 01/11/88

SAMPLE I.D.: EFA-1511-5

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
in Soil (EPA 8270)

<u>Compound</u>	<u>Concentration</u> <u>mg/kg</u>	<u>Detection Limit</u> <u>mg/kg</u>
Butyl Carbitol	ND	*1
Dibutyl Phthalate	ND	*1
Diphenylamine	ND	*1
Diphenyl Guanadine	ND	*1
Quinone	ND	*1

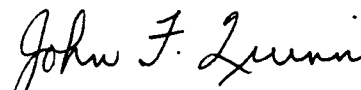
* = less than
ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1



John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 01/18/88

DATE RECEIVED: 12/16/87

DATE SAMPLED: 12/15/87

LAB NO.: 94166-9

DATE ANALYZED: 01/11/88

SAMPLE I.D.: EFA-1511-9

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
in Soil (EPA 8270)

<u>Compound</u>	<u>Concentration</u> <u>mg/kg</u>	<u>Detection Limit</u> <u>mg/kg</u>
Butyl Carbitol	ND	*1
Dibutyl Phthalate	ND	*1
Diphenylamine	ND	*1
Diphenyl Guanadine	ND	*1
Quinone	ND	*1

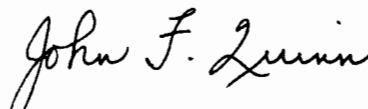
* = less than
ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1



John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 01/18/88

DATE RECEIVED: 12/16/87

DATE SAMPLED: 12/15/87

LAB NO.: 94166-10

DATE ANALYZED: 01/11/88

SAMPLE I.D.: EFA-0240-1

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
in Soil (EPA 8270)

<u>Compound</u>	<u>Concentration</u> <u>mg/kg</u>	<u>Detection Limit</u> <u>mg/kg</u>
Butyl Carbitol	ND	*1
Dibutyl Phthalate	ND	*1
Diphenylamine	ND	*1
Diphenyl Guanadine	ND	*1
Quinone	ND	*1

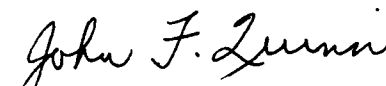
* = less than
ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1



John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 01/18/88

DATE RECEIVED: 12/16/87

DATE SAMPLED: 12/15/87

LAB NO.: 94166-17

DATE ANALYZED: 01/11/88

SAMPLE I.D.: EFA-0240-8

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
in Soil (EPA 8270)

<u>Compound</u>	<u>Concentration</u> <u>mg/kg</u>	<u>Detection Limit</u> <u>mg/kg</u>
Butyl Carbitol	ND	*1
Dibutyl Phthalate	ND	*1
Diphenylamine	ND	*1
Diphenyl Guanadine	ND	*1
Quinone	ND	*1

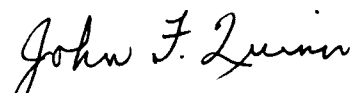
* = less than
ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1



John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

DATE ANALYZED: 12/02/87

LAB. NO.: 94118-1

SAMPLE I.D.: BGA-2323-1

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>	RECEIVED BY WENCK ASSOCIATES INC.
Antimony	7041	ND	*10	DEC 21 1987
Arsenic	7060	4	* 3	
Barium	6010	50	*50	
Beryllium	6010	ND	*0.5	
Cadmium	7131	ND	*0.5	
Chromium	7191	ND	*50	
Lead	7420	4	* 3	
Nickel	7520	ND	*10	
Selenium	7740	ND	*0.5	
Silver	7760	ND	* 3	
Thallium	7841	ND	* 5	
Boron	6010	ND	* 5	
Calcium	6010	5100	*1000	
Magnesium	6010	1400	* 500	

* = less than

ND = Not Detected

Respectfully submitted,

Paul Bredt

Paul Bredt
Environmental Chemist
PB/JFQ:mel

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94118-2

DATE ANALYZED: 12/02/87

SAMPLE I.D.: BGA-2323-2

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	3	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	ND	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	ND	* 5
Calcium	6010	3100	*1000
Magnesium	6010	1100	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Brett

Paul Brett
Environmental Chemist
PB/JFQ:mel

John F. Quinn

John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94118-3

DATE ANALYZED: 12/02/87

SAMPLE I.D.: BGA-2323-3

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	5	* 3
Barium	6010	76	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	ND	* 3
Nickel	7520	20	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	7	* 5
Calcium	6010	3100	*1000
Magnesium	6010	3300	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Brett

Paul Brett
Environmental Chemist
PB/JFQ:me1

John F. Quinn

John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94118-4

DATE ANALYZED: 12/02/87

SAMPLE I.D.: BGA-2323-4

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	ND	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	ND	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	ND	* 5
Calcium	6010	1500	*1000
Magnesium	6010	960	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Brett

Paul Brett
Environmental Chemist
PB/JFQ:mel

John F. Quinn

John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94118-5

DATE ANALYZED: 12/02/87

SAMPLE I.D.: BGA-2323-5

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	4	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	ND	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	ND	* 5
Calcium	6010	1800	*1000
Magnesium	6010	1200	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Brett

Paul Brett
Environmental Chemist
PB/JFQ:me1

John F. Quinn

John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94118-6

DATE ANALYZED: 12/02/87

SAMPLE I.D.: BGA-2323-6

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	ND	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	ND	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	ND	* 5
Calcium	6010	1600	*1000
Magnesium	6010	1200	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Bredt

Paul Bredt
Environmental Chemist
PB/JFQ:mel

John F. Quinn

John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94118-7

DATE ANALYZED: 12/02/87

SAMPLE I.D.: BGA-2822-1

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	5	* 3
Barium	6010	53	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	4	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	6	* 5
Calcium	6010	6200	*1000
Magnesium	6010	1700	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Bredt

Paul Bredt
Environmental Chemist
PB/JFQ:me1

John F. Quinn

John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94118-8

DATE ANALYZED: 12/02/87

SAMPLE I.D.: BGA-2822-2

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	4	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	12	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	7	* 5
Calcium	6010	4300	*1000
Magnesium	6010	1400	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Brett

Paul Brett
Environmental Chemist
PB/JFQ:mel

John F. Quinn

John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94118-9

DATE ANALYZED: 12/02/87

SAMPLE I.D.: BGA-2822-3

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	4	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	0.5	*0.5
Chromium	7191	ND	*50
Lead	7420	ND	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	ND	* 5
Calcium	6010	2200	*1000
Magnesium	6010	1700	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Brett

Paul Brett
Environmental Chemist
PB/JFQ:mel

John F. Quinn

John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94118-10

DATE ANALYZED: 12/02/87

SAMPLE I.D.: BGA-2822-4

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	ND	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	ND	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	ND	* 5
Calcium	6010	2100	*1000
Magnesium	6010	1100	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Bredt

Paul Bredt
Environmental Chemist
PB/JFQ:mel

John F. Quinn

John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94118-11

DATE ANALYZED: 12/02/87

SAMPLE I.D.: BGA-2822-5

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	5	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	ND	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	ND	* 5
Calcium	6010	1700	*1000
Magnesium	6010	1300	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Brett

Paul Brett
Environmental Chemist
PB/JFQ:mel

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94118-12

DATE ANALYZED: 12/02/87

SAMPLE I.D.: BGA-2822-6

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	6	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	ND	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	ND	* 5
Calcium	6010	2000	*1000
Magnesium	6010	1600	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Bredt

Paul Bredt
Environmental Chemist
PB/JFQ:me1

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94118-13

DATE ANALYZED: 12/02/87

SAMPLE I.D.: BGA-0115-1

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	5	* 3
Barium	6010	52	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	4	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	6	* 5
Calcium	6010	4500	*1000
Magnesium	6010	1500	* 500

* = less than
ND = Not Detected

Respectfully submitted,

Paul Bredt

Paul Bredt
Environmental Chemist
PB/JFQ:me1

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

DATE ANALYZED: 12/02/87

LAB. NO.: 94118-14

SAMPLE I.D.: BGA-0115-2

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	4	* 3
Barium	6010	64	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	4	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	7.4	* 5
Calcium	6010	5700	*1000
Magnesium	6010	1900	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Bredt

Paul Bredt
Environmental Chemist
PB/JFQ:mel

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94118-15

DATE ANALYZED: 12/02/87

SAMPLE I.D.: BGA-0115-3

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	4	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	4	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	8.2	* 5
Calcium	6010	5300	*1000
Magnesium	6010	2100	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Brett

Paul Brett
Environmental Chemist
PB/JFQ:mel

John F. Quinn

John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94118-16

DATE ANALYZED: 12/02/87

SAMPLE I.D.: BGA-0115-4

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	5	* 3
Barium	6010	56	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	4	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	9	* 5
Calcium	6010	3400	*1000
Magnesium	6010	2300	* 500

* = less than

ND = Not Detected

Respectfully submitted,

JG Patel
FOR Paul Brett
Environmental Chemist
PB/JFQ:mel

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94118-17

DATE ANALYZED: 12/02/87

SAMPLE I.D.: BGA-0115-5

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	4	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	4	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	ND	* 5
Calcium	6010	2100	*1000
Magnesium	6010	1100	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Bredt

Paul Bredt
Environmental Chemist
PB/JFQ:me1

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94118-18

DATE ANALYZED: 12/02/87

SAMPLE I.D.: BGA-0115-6

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	6	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	ND	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	ND	* 5
Calcium	6010	1800	*1000
Magnesium	6010	1200	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Brett

Paul Brett
Environmental Chemist
PB/JFQ:mel

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94118-19

DATE ANALYZED: 12/02/87

SAMPLE I.D.: BGA-1223-1

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	5	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	ND	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	6	* 5
Calcium	6010	3600	*1000
Magnesium	6010	1600	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Bredt

Paul Bredt
Environmental Chemist
PB/JFQ:me1

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94118-20

DATE ANALYZED: 12/02/87

SAMPLE I.D.: BGA-1223-2

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	6	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	ND	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	6	* 5
Calcium	6010	2100	*1000
Magnesium	6010	1400	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Brett

Paul Brett
Environmental Chemist
PB/JFQ:me1

John F. Quinn

John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94118-21

DATE ANALYZED: 12/02/87

SAMPLE I.D.: BGA-1223-3

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	6	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	ND	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	ND	* 5
Calcium	6010	1600	*1000
Magnesium	6010	1500	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Brett
Paul Brett
Environmental Chemist
PB/JFQ:me1

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94118-22

DATE ANALYZED: 12/02/87

SAMPLE I.D.: BGA-1223-4

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	5	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	ND	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	ND	* 5
Calcium	6010	1500	*1000
Magnesium	6010	1200	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Brett

Paul Brett
Environmental Chemist
PB/JFQ:me1

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94118-23

DATE ANALYZED: 12/02/87

SAMPLE I.D.: BGA-1223-5

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	5	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	ND	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	ND	* 5
Calcium	6010	1900	*1000
Magnesium	6010	1400	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul B Brett

Paul Brett
Environmental Chemist
PB/JFQ:mel

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94118-24

DATE ANALYZED: 12/02/87

SAMPLE I.D.: BGA-1223-6

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	6	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	ND	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	ND	* 5
Calcium	6010	2000	*1000
Magnesium	6010	1700	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Brett

Paul Brett
Environmental Chemist
PB/JFQ:mel

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

February 15, 1988

Bermite Division of Whittaker
22115 W. Soledad Canyon Road
Saugus, CA 91350

Gentlemen:

RE: COPPER ANALYSES

Presented below are the results of the analyses performed on your six (6) samples received November 20, 1987. The samples have been described, as received, along with the data.

DATA

Date Sampled: 11/20/87
Date Analyzed: 2/12/88

<u>Lab. No.</u>	<u>Sample I.D.</u>	<u>Copper (mg/kg)</u>	<u>Detection Limit (mg/kg)</u>
94118-1	BGA-2323-1	ND	10
94118-2	BGA-2323-2	ND	10
94118-3	BGA-2323-3	ND	10
94118-4	BGA-2323-4	ND	10
94118-5	BGA-2323-5	ND	10
94118-6	BGA-2323-6	ND	10

ND = Not detected at or above the
concentration of the detection limit.

Very truly yours,
FGL ENVIRONMENTAL, INC.

Paul Brett
Paul Brett
Environmental Chemist

PB/JQ:cem

John Quinn
John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

February 15, 1988

Bermite Division of Whittaker
22115 W. Soledad Canyon Road
Saugus, CA 91350

Gentlemen:

RE: COPPER ANALYSES

Presented below are the results of the analyses performed on your six (6) samples received November 20, 1987. The samples have been described, as received, along with the data.

DATA

Date Sampled: 11/20/87
Date Analyzed: 2/12/88

<u>Lab. No.</u>	<u>Sample I.D.</u>	<u>Copper (mg/kg)</u>	<u>Detection Limit (mg/kg)</u>
94118-7	BGA-2822-1	ND	10
94118-8	BGA-2822-2	ND	10
94118-9	BGA-2822-3	ND	10
94118-10	BGA-2822-4	ND	10
94118-11	BGA-2822-5	ND	10
94118-12	BGA-2822-6	ND	10

ND = Not detected at or above the
concentration of the detection limit.

Very truly yours,
FGL ENVIRONMENTAL, INC.

Paul Brett
Paul Brett
Environmental Chemist

PB/JQ:cem

John Quinn
John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

February 15, 1988

Bermite Division of Whittaker
22115 W. Soledad Canyon Road
Saugus, CA 91350

Gentlemen:

RE: COPPER ANALYSES

Presented below are the results of the analyses performed on your six (6) samples received November 20, 1987. The samples have been described, as received, along with the data.

DATA

Date Sampled: 11/20/87

Date Analyzed: 2/12/88

<u>Lab. No.</u>	<u>Sample I.D.</u>	<u>Copper (mg/kg)</u>	<u>Detection Limit (mg/kg)</u>
94118-13	BGA-0115-1	23	10
94118-14	BGA-0115-2	ND	10
94118-15	BGA-0115-3	14	10
94118-16	BGA-0115-4	ND	10
94118-17	BGA-0115-5	ND	10
94118-18	BGA-0115-6	ND	10

ND = Not detected at or above the
concentration of the detection limit.

Very truly yours,
FGL ENVIRONMENTAL, INC.

Paul Brett
Paul Brett
Environmental Chemist

PB/JQ:cem

John Quinn
John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

February 15, 1988

Bermite Division of Whittaker
22115 W. Soledad Canyon Road
Saugus, CA 91350

Gentlemen:

RE: COPPER ANALYSES

Presented below are the results of the analysis of the samples received November 20, 1987. The samples were received, along with the data.

DATA

Date Sampled: 11/20/87

Date Analyzed: 2/12/88

<u>Lab. No.</u>	<u>Sample I.D.</u>	<u>Copper (mg/k)</u>
94118-19	BGA-1223-1	ND
94118-20	BGA-1223-2	ND
94118-21	BGA-1223-3	ND
94118-22	BGA-1223-4	ND
94118-23	BGA-1223-5	ND
94118-24	BGA-1223-6	ND

ND = Not detected at or above the concentration of the detection limit.

Very truly yours,
FGL ENVIRONMENTAL, INC.

Paul Bredt
Paul Bredt
Environmental Chemist

PB/JQ:cem

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/28/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

DATE ANALYZED: 12/11-12/23/87

REPORT OF ANALYSIS FOR MERCURY IN SOIL (EPA METHOD 7471)

<u>Sample I.D.</u>	<u>Lab No.</u>	<u>Mercury (mg/kg)</u>
BGA-2323-1	94118-1	*0.1
BGA-2323-2	94118-2	*0.1
BGA-2323-3	94118-3	*0.1
BGA-2323-4	94118-4	*0.1
BGA-2323-5	94118-5	*0.1
BGA-2323-6	94118-6	*0.1
BGA-2822-1	94118-7	*0.1
BGA-2822-2	94118-8	*0.1
BGA-2822-3	94118-9	*0.1
BGA-2822-4	94118-10	*0.1
BGA-2822-5	94118-11	*0.1
BGA-2822-6	94118-12	*0.1
BGA-0115-1	94118-13	*0.1
BGA-0115-2	94118-14	*0.1
BGA-0115-3	94118-15	*0.1
BGA-0115-4	94118-16	*0.1
BGA-0115-5	94118-17	*0.1
BGA-0115-6	94118-18	*0.1
BGA-1223-1	94118-19	*0.1
BGA-1223-2	94118-20	*0.1
BGA-1223-3	94118-21	*0.1
BGA-1223-4	94118-22	*0.1
BGA-1223-5	94118-23	*0.1
BGA-1223-6	94118-24	*0.1
317-6331-1	94119-1	*0.1
317-6331-2	94119-2	*0.1
317-6331-3	94119-3	*0.1
317-6331-4	94119-4	*0.1
317-6331-5	94119-5	*0.1
317-6331-6	94119-6	*0.1

<u>Sample I.D.</u>	<u>Lab No.</u>	<u>Mercury (mg/kg)</u>
317-0745-1	94119-7	*0.1
317-0745-2	94119-8	*0.1
317-0745-3	94119-9	*0.1
317-1397-1	94119-10	*0.1
317-1397-2	94119-11	*0.1
317-1397-3	94119-12	*0.1
317-2092-1	94119-13	*0.1
317-2092-2	94119-14	*0.1
317-2092-3	94119-15	*0.1
317-3369-1	94119-16	*0.1
317-3369-2	94119-17	*0.1
317-3369-3	94119-18	*0.1
317-3752-1	94119-19	*0.1
317-3752-2	94119-20	*0.1
317-3752-3	94119-21	*0.1
317-6089-1	94119-22	*0.1
317-6089-2	94119-23	*0.1
317-6089-3	94119-24	*0.1
317-7573-1	94119-25	*0.1
317-7573-2	94119-26	*0.1
317-7573-3	94119-27	*0.1
BA-6125-3	94120-1	*0.1
BCPR-2138-3	94120-2	*0.1
EFA-3709-5	94120-3	*0.1
342-2045-4	94120-4	*0.1

Very truly yours,
FGL Environmental

Paul Bredt
Paul Bredt

PB/CG:me1

Charles Green
Charles Green, Ph.D.
Lab Director

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

January 22, 1988

Lab No.: 94118, 94119 & 94120

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

WENCK, INC.

JAN 26 1988

Gentlemen:

RE: FLUORIDE RESULTS

Presented below are the results of the analyses conducted on your forty (40) fluoride samples received on November 25, 1987. The samples have been described, as received, along with the data.

<u>Description</u>	<u>Lab No.:</u>	<u>Fluoride (mg/kg)</u>
BGA-1223-1	94118-19	ND
BGA-1223-2	94118-20	270
BGA-1223-2	94118-21	ND
BGA-1223-4	94118-22	260
BGA-1223-5	94118-23	ND
BGA-1223-6	94118-24	ND
317-6331-1	94119-1	ND
317-6331-2	94119-2	ND
317-6331-3	94119-3	140
317-6331-4	94119-4	160
317-6331-5	94119-5	220
317-6331-6	94119-6	140
417-0745-1	94119-7	160
417-0745-2	94119-8	170
417-0745-3	94119-9	130
317-1397-1	94119-10	160
317-1397-3	94119-12	170
BGA-2323-1	94118-1	ND
BGA-2323-2	94118-2	340
BGA-2323-3	94118-3	ND
BGA-2323-4	94118-4	ND
BGA-2323-5	94118-5	170
BGA-2323-6	94118-6	180

FGL ENVIRONMENTAL, INC.

Paul Bredt

Paul Bredt
Environmental Chemist

PB/JQ:me1

John Quinn

John Quinn, Ph.D.
Environmental Chemist

<u>Description</u>	<u>Lab No.:</u>	<u>Fluoride (mg/kg)</u>
BGA-2822-1	94118-7	420
BGA-2822-2	94118-8	180
BGA-2822-3	94118-9	130
BGA-2822-4	94118-10	160
BGA-2822-5	94118-11	160
BGA-2822-6	94118-12	110
BGA-0115-1	94118-13	390
BGA-0115-2	94118-14	180
BGA-0115-3	94118-15	380
BGA-0115-4	94118-16	ND
BGA-0115-5	94118-17	160
BGA-0115-6	94118-18	120
317-2092-1	94119-13	176
BA-6125-3	94120-1	ND
BCPR-2138-3	94120-2	180
EFA-3709-5	94120-3	220
342-2045-4	94120-4	ND

* = Not detected at or above 100 mg/kg

FGL ENVIRONMENTAL, INC.

Paul Bredt

Paul Bredt
Environmental Chemist

PB/JQ:me1

John Quinn

John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

RECEIVED BY
WENCK & ASSOCIATES INC.

DEC 28 1987

December 24, 1987
Lab No.: 94118, 94119 and 94120

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

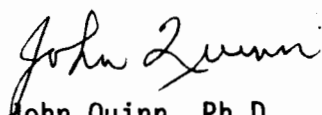
RE: SOIL ANALYSES - pH

Gentlemen:

Attached are the results of analyses performed on your fifty-five (55) soil samples received on November 25, 1987. The samples have been described, as received, along with the data.

If you have any questions, please call or write.

Very truly yours,
FRUIT GROWERS LABORATORY, INC.



John Quinn, Ph.D
Environmental Chemist

JQ:mel

TEST RESULTS

<u>Lab No.</u>	<u>Description</u>	<u>pH</u>
94118-1	BGA-2323-1	8.0
94118-2	BGA-2323-2	7.7
94118-3	BGA-2323-3	7.7
94118-4	BGA-2323-4	7.7
94118-5	BGA-2323-5	7.7
94118-6	BGA-2323-6	7.6
94118-7	BGA-2822-7	8.0
94118-8	BGA-2822-8	7.2
94118-9	BGA-2822-9	7.4
94118-10	BGA-2822-10	7.5
94118-11	BGA-2822-11	7.3
94118-12	BGA-28226-12	7.7
94118-13	BGA-0115-13	8.1
94118-14	BGA-0115-14	8.1
94118-15	BGA-0115-15	8.2
94118-16	BGA-0115-16	7.6
94118-17	BGA-0115-17	7.7
94118-18	BGA-0115-18	8.0
94118-19	BGA-1223-1	8.1
94118-20	BGA-1223-2	7.5
94118-21	BGA-1223-3	6.9
94118-22	BGA-1223-4	6.9
94118-23	BGA-1223-5	6.7
94118-24	BGA-1223-6	7.3

FGL ENVIRONMENTAL, INC.

By John Quinn
John Quinn, Ph.D.
Environmental Chemist

JQ:me1

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

RECEIVED BY
WENCK ASSOCIATES INC.

HAZARDOUS WASTE CHARACTERIZATION (SOIL/ASH)

MAR 19 1988

March 10, 1988
Lab No. 833-1

Bermite, Division of Whittaker
22116 West Soledad Road
Saugus, California 91350

Sample Description: #1 Background
Sampled by: Client
Date Sampled: March 7, 1988
Date Received: March 8, 1988

AMENDED REPORT

REPORT OF ANALYSIS

<u>Parameters</u>	<u>Test Results</u> <u>mg/wipe</u>	<u>Detection</u> <u>Limit</u> <u>mg/wipe</u>
Boron	ND	0.01
Lead	ND	0.01
Magnesium	0.4	0.05

ND = Not detected at or above the
concentration of the detection limit.

mg/wipe = ppm

Very truly yours,
FGL ENVIRONMENTAL, INC.

Kristi Robinson
Environmental Chemist

John Quinn, Ph.D.
Environmental Chemist

KR/JQ:me1

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

HAZARDOUS WASTE CHARACTERIZATION (SOIL/ASH)

March 10, 1988
Lab No. 833-2

Bermite, Division of Whittaker
22116 West Soledad Road
Saugus, California 91350

Sample Description: #2 Bldg 223
Sampled by: Client
Date Sampled: March 7, 1988
Date Received: March 8, 1988

AMENDED REPORT

REPORT OF ANALYSIS

<u>Parameters</u>	<u>Test Results</u> <u>mg/wipe</u>	<u>Detection</u> <u>Limit</u> <u>mg/wipe</u>
Boron	ND	0.01
Lead	ND	0.01
Magnesium	0.10	0.05

ND = Not detected at or above the
concentration of the detection limit.

mg/wipe = ppm

Very truly yours,
FGL ENVIRONMENTAL, INC.

Kristi Robinson
Environmental Chemist

John Quinn, Ph.D.
Environmental Chemist

KR/JQ:me1

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

HAZARDOUS WASTE CHARACTERIZATION (SOIL/ASH)

March 10, 1988
Lab No. 833-3

Bermite, Division of Whittaker
22116 West Soledad Road
Saugus, California 91350

Sample Description: #3 Bldg 223
Sampled by: Client
Date Sampled: March 7, 1988
Date Received: March 8, 1988

AMENDED REPORT

REPORT OF ANALYSIS

<u>Parameters</u>	<u>Test Results</u> <u>mg/wipe</u>	<u>Detection</u> <u>Limit</u> <u>mg/wipe</u>
Boron	ND	0.01
Lead	ND	0.01
Magnesium	0.10	0.05

ND = Not detected at or above the
concentration of the detection limit.

mg/wipe = ppm

Very truly yours,
FGL ENVIRONMENTAL, INC.

Kristi Robinson
Environmental Chemist

John Quinn, Ph.D.
Environmental Chemist

KR/JQ:me1

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

HAZARDOUS WASTE CHARACTERIZATION (SOIL/ASH)

March 10, 1988
Lab No. 833-4

Bermite, Division of Whittaker
22116 West Soledad Road
Saugus, California 91350

Sample Description: #4 Bldg 223 Blank
Sampled by: Client
Date Sampled: March 7, 1988
Date Received: March 8, 1988

AMENDED REPORT

REPORT OF ANALYSIS

<u>Parameters</u>	<u>Test Results</u> <u>mg/wipe</u>	<u>Detection</u> <u>Limit</u> <u>mg/wipe</u>
Boron	ND	0.01
Lead	ND	0.01
Magnesium	0.10	0.05

ND = Not detected at or above the
concentration of the detection limit.

mg/wipe = ppm

Very truly yours,
FGL ENVIRONMENTAL, INC.

Kristi Robinson
Environmental Chemist

John Quinn, Ph.D.
Environmental Chemist

KR/JQ:me1

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite
22116 West Soledad Canyon Road
Saugus, California 91350

LAB NO.: 833-6

SAMPLE I.D.: BLD 223

DATE REPORTED: 03/22/88

DATE RECEIVED: 03/08/88

DATE SAMPLED: 03/07/88

Report of GC/MS analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
on Wipes (EPA 625/8270)

<u>Compound</u>	Weight <u>mg</u>	Detection Limit <u>mg</u>
Dibutyl Phthalate	ND	*10
Diphenylamine	ND	* 0.1

* = Less than

ND = Not detected at or above the
concentration of the detection limit

Very truly yours,
FGL ENVIRONMENTAL, INC.



J.G. Patel, M.S.
Environmental Chemist



John Quinn, Ph.D.
Environmental Chemist

JP/JQ:me1

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

January 21, 1988
Lab No.: 94156

Bermite, Division of Whittaker
22116 West Soledad Road
Saugus, California 91350

Test Results

<u>Lab No.</u>	<u>Description</u>	Boron (B) <u>mg</u>	Boron Detection <u>Limit</u>	Lead (Pb) <u>mg</u>	Lead Detection <u>Limit</u>	Magnesium (Mg) <u>mg</u>	Magnesium Detection <u>Limit</u>
94156	Blank	ND	0.005	ND	0.003	ND	0.01
94156-4	236-2	0.005	0.005	0.05	0.003	0.8	0.01

ND = Not detected at or above the
concentration of the detection limit.

If you have any questions, please call or write.

Very truly yours,
FGL ENVIRONMENTAL, INC.

Paul Bredt
Paul Bredt
Environmental Chemist

John Quinn
John Quinn, Ph.D.
Environmental Chemist

PB/JQ:me1

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 01/26/88

DATE RECEIVED: 12/09/87

DATE SAMPLED: 12/09/87

LAB NO.: 94156-3

DATE ANALYZED: 01/15/88

SAMPLE I.D.: 236-1

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
on Wipes(EPA 625/8270)

<u>Compound</u>	Weight <u>mg</u>	Detection Limit <u>mg</u>
Dibutyl Phthalate	ND	*10
Diphenylamine	ND	*0.1

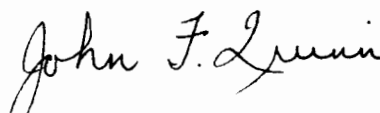
* = less than
ND = Not Detected



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1

Respectfully submitted,



John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 01/26/88

DATE RECEIVED: N/A

DATE SAMPLED: N/A

LAB NO.: 94156

DATE ANALYZED: 01/15/88

SAMPLE I.D.: SPIKED WIPE

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
on Wipes(EPA 625/8270)

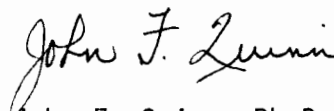
<u>Compound</u>	Percentage Recovery %
Dibutyl Phthalate	90
Diphenylamine	100

* = less than
ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist



John F. Quinn, Ph.D.
Environmental Chemist

JGP/JFQ:me1

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 01/26/88

DATE RECEIVED: N/A

DATE SAMPLED: N/A

LAB NO.: Sample Blank

DATE ANALYZED: 01/15/88

SAMPLE I.D.:

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
on Wipes(EPA 625/8270)

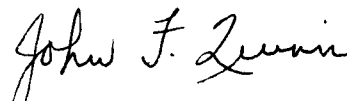
<u>Compound</u>	Weight <u>mg</u>	Detection Limit <u>mg</u>
Dibutyl Phthalate	ND	*10
Diphenylamine	ND	*0.1

* = less than
ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist



John F. Quinn, Ph.D.
Environmental Chemist

JGP/JFQ:me1

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

UNDERGROUND STORAGE TANK ANALYSES

March 22, 1988
Lab No. 1259-1

Bermite
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Station # 207-1
Sampled by: Tim Bricker
Date Sampled: March 21, 1988
Date Received: March 21, 1988

REPORT OF ANALYSIS

<u>Parameter</u>	<u>Test Results</u>	<u>Reporting Unit</u>	<u>Detection Limit</u>
Total Lead	ND	mg/kg	4

ND = Not detected at or above the
concentration of the detection limit.

mg/kg = ppm

Very truly yours,
FGL ENVIRONMENTAL, INC.

Paul Brett
Paul Brett
Environmental Chemist

PB/JQ:me1

John Quinn
John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

UNDERGROUND STORAGE TANK ANALYSES

March 22, 1988
Lab No. 1259-2

Bermite
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Station # 207-2
Sampled by: Tim Bricker
Date Sampled: March 21, 1988
Date Received: March 21, 1988

REPORT OF ANALYSIS

<u>Parameter</u>	<u>Test Results</u>	<u>Reporting Unit</u>	<u>Detection Limit</u>
Total Lead	ND	mg/kg	4

ND = Not detected at or above the
concentration of the detection limit.

mg/kg = ppm

Very truly yours,
FGL ENVIRONMENTAL, INC.

Paul B. Brett
Paul Brett
Environmental Chemist

PB/JQ:me1

John Quinn
John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

UNDERGROUND STORAGE TANK ANALYSES

March 22, 1988
Lab No. 1259-3

Bermite
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Station # 207-3
Sampled by: Tim Bricker
Date Sampled: March 21, 1988
Date Received: March 21, 1988

REPORT OF ANALYSIS

<u>Parameter</u>	<u>Test Results</u>	<u>Reporting Unit</u>	<u>Detection Limit</u>
Total Lead	ND	mg/kg	4

ND = Not detected at or above the
concentration of the detection limit.

mg/kg = ppm

Very truly yours,
FGL ENVIRONMENTAL, INC.

Paul B. Brett

Paul Brett
Environmental Chemist

PB/JQ:me1

John Quinn

John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

UNDERGROUND STORAGE TANK ANALYSES

March 22, 1988
Lab No. 1259-4

Bermite
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Station # 207-4
Sampled by: Tim Bricker
Date Sampled: March 21, 1988
Date Received: March 21, 1988

REPORT OF ANALYSIS

<u>Parameter</u>	<u>Test Results</u>	<u>Reporting Unit</u>	<u>Detection Limit</u>
Total Lead	ND	mg/kg	4

ND = Not detected at or above the
concentration of the detection limit.

mg/kg = ppm

Very truly yours,
FGL ENVIRONMENTAL, INC.

Paul Brett
Paul Brett
Environmental Chemist

PB/JQ:me1

John Quinn
John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

UNDERGROUND STORAGE TANK ANALYSES

March 22, 1988
Lab No. 1259-5

Bermite
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Station # 207-5
Sampled by: Tim Bricker
Date Sampled: March 21, 1988
Date Received: March 21, 1988

REPORT OF ANALYSIS

<u>Parameter</u>	<u>Test Results</u>	<u>Reporting Unit</u>	<u>Detection Limit</u>
Total Lead	ND	mg/kg	4

ND = Not detected at or above the
concentration of the detection limit.

mg/kg = ppm

Very truly yours,
FGL ENVIRONMENTAL, INC.

Paul Bredt

Paul Bredt
Environmental Chemist

PB/JQ:me1

John Quinn

John Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

UNDERGROUND STORAGE TANK ANALYSES

March 22, 1988
Lab No. 1259-6

Bermite
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Station # 207-6
Sampled by: Tim Bricker
Date Sampled: March 21, 1988
Date Received: March 21, 1988

REPORT OF ANALYSIS

<u>Parameter</u>	<u>Test Results</u>	<u>Reporting Unit</u>	<u>Detection Limit</u>
Total Lead	ND	mg/kg	4

ND = Not detected at or above the
concentration of the detection limit.

mg/kg = ppm

Very truly yours,
FGL ENVIRONMENTAL, INC.

Paul Brett
Paul Brett
Environmental Chemist

PB/JQ:me1

John Quinn
John Quinn, Ph.D.
Environmental Chemist

APPENDIX F

40 CFR 261 APPENDIX VIII HAZARDOUS CONSTITUENTS
TO BE TESTED FOR

The following compounds have been selected from Appendix VIII of 40 CFR 261 as having been possibly used during production and/or research and development at the Bermite facility. The complete list of Appendix VIII constituents was reviewed by the former chief chemist and the former vice president of research and development of Bermite. According to these experts, the compounds from Appendix VIII not listed below were not used or created at Bermite, nor are they products of reaction or products of degradation.

Antimony Compounds (NOS) - Antimony Trisulphide

Barium Compounds (NOS) - Barium Nitrate

Benzene

Beryllium

Butyl Acetate

Calcium Chromate

Carbon Disulfide

Chloroform

Dichloromethane

Dinitrobenzene

Diphenylamine

Formaldehyde

Hexachloroethane

Hydrofluoric Acid

Isobutyl Alcohol

Lead Compounds (NOS) - Lead Azide, Lead Styphnate, Lead

Methyl Ethyl Ketone

Methyl Methacrylate

Naphthalene

Nickel

Oxides

Potassium Cyanide

Potassium Perchlorate

Thallium

Toluene

1,1,1-Trichloroethane

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

December 18, 1987

Christopher Thompson, P.E.
Werck Associates, Inc.
15500 Wayzata Blvd, Suite 832
Wayzata, MN 55391

Dear Mr. Thompson:

RE: FORMALDEHYDE/NIOSH 3500

Presenting the attached results of analyses performed on your five (5) soil samples received on November 20, 1987. The samples have been described, as received, along with the data. Please note that the analyses were performed by Clayton Environmental Consultants, Inc.

<u>FGL NO:</u>	<u>BERMITE DESCRIPTION</u>
94119-6B	317-6331-6
94120-1B	BA-6125-3
94120-2B	BCPR-2138-3
94120-3B	EFA-3709-5
94120-4B	342-2045-4

If you have any questions, please call or write.

Very truly yours,
FGL ENVIRONMENTAL, INC.



John Quinn, Ph.D
Environmental Chemist

JQ:mel

RECEIVED BY
WENCK ASSOCIATES INC,

DEC 21 1987

Clayton Environmental Consultants, Inc.

P.O. Box 9019 • 1252 Quarry Lane • Pleasanton, California 94566 • (415) 426-2600

December 16, 1987

Laboratory Client Code No. 0320

Mr. John Quinn
Fruit Growers Laboratory, Inc.
853 Corporation Street
P.O. Box 272
Santa Paula, California 93060

Dear Mr. Quinn:

Attached are the results of the following samples. The sample and analysis information is as follows:

<u>Date</u> <u>Sample</u> <u>Received</u>	<u>Clayton Lab</u> <u>Batch No.</u>	<u>Client</u> <u>Sample</u> <u>I.D.</u>	<u>Matrix</u>	<u>Analysis/</u> <u>Method No.</u>
12/02/87	871212	94120-1B	Soil	Formaldehyde/NIOSH
		94120-2B		3500
		94120-3B		
		94120-4B		
		94119-6B		

A copy of the Chain of Custody form is attached for your information.

If you have any questions regarding this information, please do not hesitate to call.

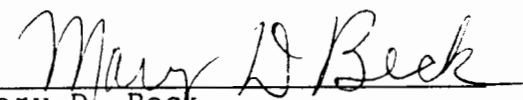
Sincerely,



Hon-Tsing Su
Laboratory Manager

HTS/tb
Attachment
L1815.REP

Approved by:


Mary D. Beck
Quality Assurance Manager

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.INORGANIC LAB ANALYSISMethod No. NIOSH 3500

Lab Batch No. 871212
Samples Received: 12/02/87
Date Analyzed: 12/07/87
Sample Matrix: Soil

Batch Sub. No.	Sample Identification	Formaldehyde
		Concentration in mg/kg
-01	94120-1B	<1.0
-02	94120-2B	<1.0
-03	94120-3B	<1.0
-04	94120-4B	<1.0
-05	94119-6B	<1.0

ND = Not Detected

Detection Limits = 1.0 mg/kg

UIT GROWERS LABORATORY, INC.
853 Corporation Street
P. O. Box 272
Santa Paula, California 93060

871212

CHAIN OF CUSTODY

DATE TIME: 12/2/87 10:30 am
RECEIVED BY: Tracy G. Bullitt
RELEASED BY: FEDERAL EXPRESS

LABORATORY TESTING SUBMISSION SHEET

Client: _____

Submitted to: Clayton Environmental

Lab. No. _____

Date Received: _____

Date Mailed: 12-1 via Fed'X

Sample Description: _____

Site name	Lab #
① 317-6331-6	94119-6B -051x 40ml
② BCP R-2138-3	94120-2B -02
③ 342-2045-4	94120-4B -04
④ EFA-3709-5	94120-3B -03
⑤ BA-6125-3	94120-1B -01 ✓

Test Requested:

Formaldehyde on all 5

1x 5ml vial

in this bag is a green capped vial containing
-0.1 gm of 1,3-Diphenylguanidine

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/29/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87


DATE ANALYZED: 12/04/87

Report of GC/MS Analysis for
BASE/NEUTRAL/ACID EXTRACTABLE ORGANICS
in Soil (EPA 625/8270)

	<u>Sample I.D.</u>	<u>Compound</u>	<u>Concentration</u> <u>mg/kg</u>	<u>Detection Limit</u> <u>mg/kg</u>
317	94119-6B	Quinone	ND	*1
BA	94120-1B	Quinone	ND	*1
SCPR	94120-2B	Quinone	ND	*1
EPA	94120-3B	Quinone	ND	*1
342	94120-4B	Quinone	ND	*1

* = less than
ND = Not Detected

Respectfully submitted,
FGL ENVIRONMENTAL, INC.



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

December 24, 1987
Lab No.: 94120-1B

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Gentlemen:

RE: RELEASABLE CYANIDE - EPA SW846 Method 7.3.3.2

Presenting results of analysis performed on your soil samples received on November 24, 1987. The samples have been described, as received, along with the data.

DATA

<u>Description</u>	<u>Cyanide Wet Weight mg/kg (ppm)</u>
BA-6125-3	*0.5

* = Low Spike Recovery

If you have any questions, please call or write.

Very truly yours,
FGL ENVIRONMENTAL, INC.

Paul Brett
Paul Brett
Environmental Chemist

Charles Green
Charles Green, Ph.D.
Environmental Chemist

PB/JQ:me1

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

December 24, 1987
Lab No.: 94120-2B

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Gentlemen:

RE: RELEASABLE CYANIDE - EPA SW846 Method 7.3.3.2

Presenting results of analysis performed on your soil samples received on November 24, 1987. The samples have been described, as received, along with the data.

DATA

<u>Description</u>	<u>Cyanide Wet Weight mg/kg (ppm)</u>
BCPR-2138-3	*0.5

* = Low Spike Recovery

If you have any questions, please call or write.

Very truly yours,
FGL ENVIRONMENTAL, INC.

Paul Brett
Paul Brett
Environmental Chemist

Charles Green
Charles Green, Ph.D.
Environmental Chemist

PB/JQ:me1

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

December 24, 1987
Lab No.: 94120-3B

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Gentlemen:

RE: RELEASABLE CYANIDE - EPA SW846 Method 7.3.3.2

Presenting results of analysis performed on your soil samples received on November 24, 1987. The samples have been described, as received, along with the data.

DATA

<u>Description</u>	<u>Cyanide Wet Weight mg/kg (ppm)</u>
EFA-3709-5	*0.5

* = Low Spike Recovery

If you have any questions, please call or write.

Very truly yours,
FGL ENVIRONMENTAL, INC.

Paul Bredt

Paul Bredt
Environmental Chemist

Charles Green

Charles Green, Ph.D.
Environmental Chemist

PB/JQ:me1

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

December 24, 1987
Lab No.: 94120-4B

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Gentlemen:

RE: RELEASABLE CYANIDE - EPA SW846 Method 7.3.3.2

Presenting results of analysis performed on your soil samples received on November 24, 1987. The samples have been described, as received, along with the data.

DATA

<u>Description</u>	<u>Cyanide Wet Weight mg/kg (ppm)</u>
342-2045-4	*0.5

* = Low Spike Recovery

If you have any questions, please call or write.

Very truly yours,
FGL ENVIRONMENTAL, INC.

Paul Brett
Paul Brett
Environmental Chemist

Charles Green
Charles Green, Ph.D.
Environmental Chemist

PB/JQ:mel

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

December 24, 1987
Lab No.: 94119-6B

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Gentlemen:

RE: RELEASABLE CYANIDE - EPA SW846 Method 7.3.3.2

Presenting results of analysis performed on your soil samples received on November 24, 1987. The samples have been described, as received, along with the data.

DATA

<u>Description</u>	<u>Cyanide Wet Weight mg/kg (ppm)</u>
317-631-6	*0.5

* = Low Spike Recovery

If you have any questions, please call or write.

Very truly yours,
FGL ENVIRONMENTAL, INC.

Paul Brett

Paul Brett
Environmental Chemist

PB/JQ:me1

Charles Green

Charles Green, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL
ANALYTICAL CHEMISTS

RECEIVED BY
WENCK ASSOCIATES INC.

DEC 28 1987

December 24, 1987
Lab No.: 94118, 94119 and 94120

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350


RE: SOIL ANALYSES - pH

Gentlemen:

Attached are the results of analyses performed on your fifty-five (55) soil samples received on November 25, 1987. The samples have been described, as received, along with the data.

If you have any questions, please call or write.

Very truly yours,
FRUIT GROWERS LABORATORY, INC.


John Quinn, Ph.D
Environmental Chemist

JQ:mel

TEST RESULTS

<u>Lab No.</u>	<u>Description</u>	<u>pH</u>
94120-1	BA-6125-3	7.8
94120-2	BCPR-2138-3	8.0
94120-3	EFA-3709-5	8.5
94120-4	342-2045-4	7.0

FGL ENVIRONMENTAL, INC.

By John Quinn
John Quinn, Ph.D.
Environmental Chemist

JQ:me1

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/09/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94120-1

DATE ANALYZED: 12/04/87

SAMPLE I.D.: BA-6125-3

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
in Soil (EPA 8270)

Compound	Concentration <u>mg/kg</u>	Detection Limit <u>mg/kg</u>
BASE/NEUTRAL EXTRACTABLE- PRIORITY POLLUTANTS:		
Butyl Carbitol	ND	*1
Dibutyl Phthalate	ND	*1
Dinitrobenzene	ND	*1
Diphenylamine	ND	*1
Diphenyl Guanadine	ND	*1
Hexachloroethane	ND	*1
Isobutyl Alcohol	ND	*1
Napthalene	ND	*1
Quinone	ND	*1

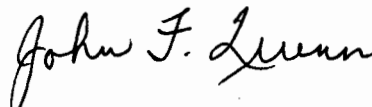
* = less than
ND = Not Detected



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1

Respectfully submitted,



John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/09/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94120-2

DATE ANALYZED: 12/04/87

SAMPLE I.D.: BCPR-2138-3

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
in Soil (EPA 8270)

<u>Compound</u>	<u>Concentration</u> <u>mg/kg</u>	<u>Detection Limit</u> <u>mg/kg</u>
BASE/NEUTRAL EXTRACTABLE- PRIORITY POLLUTANTS:		
Butyl Carbitol	ND	*1
Dibutyl Phthalate	ND	*1
Dinitrobenzene	ND	*1
Diphenylamine	ND	*1
Diphenyl Guanadine	ND	*1
Hexachloroethane	ND	*1
Isobutyl Alcohol	ND	*1
Napthalene	ND	*1
Quinone	ND	*1

* = less than

ND = Not Detected

Respectfully submitted,

JG Patel

J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1

John F. Quinn

John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/09/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94120-3

DATE ANALYZED: 12/04/87

SAMPLE I.D.: EFA-3709-5

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
in Soil (EPA 8270)

<u>Compound</u>	<u>Concentration</u> <u>mg/kg</u>	<u>Detection Limit</u> <u>mg/kg</u>
BASE/NEUTRAL EXTRACTABLE- PRIORITY POLLUTANTS:		
Butyl Carbitol	ND	*1
Dibutyl Phthalate	ND	*1
Dinitrobenzene	ND	*1
Diphenylamine	ND	*1
Diphenyl Guanadine	ND	*1
Hexachloroethane	ND	*1
Isobutyl Alcohol	ND	*1
Napthalene	ND	*1
Quinone	ND	*1

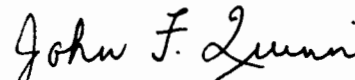
* = less than
ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1



John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/09/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94120-4

DATE ANALYZED: 12/04/87

SAMPLE I.D.: 342-2045-4

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
in Soil (EPA 8270)

<u>Compound</u>	<u>Concentration</u> <u>mg/kg</u>	<u>Detection Limit</u> <u>mg/kg</u>
BASE/NEUTRAL EXTRACTABLE- PRIORITY POLLUTANTS:		
Dinitrobenzene	ND	*1
Diphenylamine	ND	*1
Hexachloroethane	ND	*1
Isobutyl Alcohol	ND	*1
Napthalene	ND	*1

* = less than

ND = Not Detected

Respectfully submitted,

JG Patel

J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1

John F. Quinn

John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker.
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/09/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94119-6B

DATE ANALYZED: 12/04/87

SAMPLE I.D.: 317-6331-6

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
in Soil (EPA 8270)

Compound	Concentration <u>mg/kg</u>	Detection Limit <u>mg/kg</u>
BASE/NEUTRAL EXTRACTABLE- PRIORITY POLLUTANTS:		
Dinitrobenzene	ND	*1
Diphenylamine	ND	*1
Hexachloroethane	ND	*1
Isobutyl Alcohol	ND	*1
Napthalene	ND	*1

* = less than

ND = Not Detected

Respectfully submitted,

JG Patel

J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1

John F. Quinn

John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/09/87

DATE RECEIVED: N/A

DATE SAMPLED: N/A

LAB NO.: Sample Blank

DATE ANALYZED: 12/04/87

SAMPLE I.D.:

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
in Soil (EPA 8270)

Compound	Concentration mg/kg	Detection Limit mg/kg
BASE/NEUTRAL EXTRACTABLE- PRIORITY POLLUTANTS:		
Butyl Carbitol	ND	*1
Dibutyl Phthalate	2.3	*1
Dinitrobenzene	ND	*1
Diphenylamine	ND	*1
Diphenyl Guanadine	ND	*1
Hexachloroethane	ND	*1
Isobutyl Alcohol	ND	*1
Napthalene	ND	*1
Quinone	ND	*1

* = less than

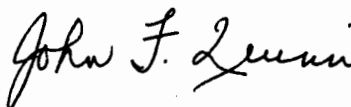
ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1



John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/09/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94120-1 Duplicate

DATE ANALYZED: 12/04/87

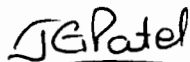
SAMPLE I.D.: BA-6125-3

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
in Soil (EPA 8270)

Compound	Concentration <u>mg/kg</u>	Detection Limit <u>mg/kg</u>
BASE/NEUTRAL EXTRACTABLE- PRIORITY POLLUTANTS:		
Butyl Carbitol	ND	*1
Dibutyl Phthalate	ND	*1
Dinitrobenzene	ND	*1
Diphenylamine	ND	*1
Diphenyl Guanadine	ND	*1
Hexachloroethane	ND	*1
Isobutyl Alcohol	ND	*1
Napthalene	ND	*1
Quinone	ND	*1

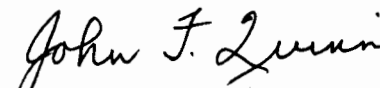
* = less than
ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1



John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/09/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94120-4 Spike

DATE ANALYZED: 12/04/87

SAMPLE I.D.: 342-2045-4

Report of GC/MS Analysis for
BASE/NEUTRAL EXTRACTABLE ORGANICS
in Soil (EPA 8270)

<u>Compound</u>	<u>Percent Recovery mg/kg</u>
BASE/NEUTRAL EXTRACTABLE- PRIORITY POLLUTANTS:	
Butyl Carbitol	70
Dibutyl Phthalate	77
Dinitrobenzene	86
Diphenylamine	82
Diphenyl Guanadine	58
Hexachloroethane	72
Isobutyl Alcohol	104
Napthalene	69
Quinone	54

* = less than
ND = Not Detected

JG Patel

J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1

Respectfully submitted,

John F. Quinn

John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94119-6

DATE ANALYZED: 11/30/87

SAMPLE I.D.: 317-6331-6

REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

Compound	Detection	
	ug/kg	Limit
Acetone	ND	* 10
Benzene	ND	* 5.0
Butyl Acetate	ND	* 5.0
Carbon Disulfide	ND	* 5.0
Chloroform	ND	* 5.0
Decane	ND	* 5.0
Ethyl Benzene	ND	* 5.0
Methylene Chloride	ND	* 5.0
Methyl Ethyl Ketone	ND	*10.0

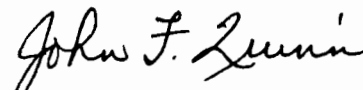
Compound	Detection	
	ug/kg	Limit
Methyl Methacrylate	ND	* 5.0
Styrene	ND	* 5.0
Tetrachloroethene	ND	* 5.0
1,1,1-Trichloroethane	ND	* 5.0
Trichloroethene	ND	* 5.0
Toluene	ND	* 5.0
Xylenes	ND	* 5.0
Undecane	ND	* 5.0

* = less than
ND = Not Detected

Respectfully submitted,



J. G. Patel, M.S.
Environmental Chemist



John F. Quinn, Ph.D.
Environmental Chemist

JGP/JFQ:me1

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94120-1

DATE ANALYZED: 11/30/87

SAMPLE I.D.: BA-6125-3

REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

<u>Compound</u>	<u>ug/kg</u>	Detection Limit <u>ug/kg</u>	<u>Compound</u>	<u>ug/kg</u>	Detection Limit <u>ug/kg</u>
Benzene	ND	* 5.0	Methyl Ethyl Ketone	ND	*10.0
Butyl Acetate	ND	* 5.0	Methyl Methacrylate	ND	* 5.0
Carbon Disulfide	ND	* 5.0	Toluene	ND	* 5.0
Chloroform	ND	* 5.0	1,1,1-Trichloroethane	ND	* 5.0
Methylene Chloride	ND	* 5.0			

* = less than
ND = Not Detected



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1

Respectfully submitted,



John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94120-2

DATE ANALYZED: 11/30/87

SAMPLE I.D.: BCPR-2138-3

REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

<u>Compound</u>	<u>ug/kg</u>	Detection Limit <u>ug/kg</u>	<u>Compound</u>	<u>ug/kg</u>	Detection Limit <u>ug/kg</u>
Benzene	ND	* 5.0	Methyl Ethyl Ketone	ND	*10.0
Butyl Acetate	ND	* 5.0	Methyl Methacrylate	ND	* 5.0
Carbon Disulfide	ND	* 5.0	Toluene	ND	* 5.0
Chloroform	ND	* 5.0	1,1,1-Trichloroethane	ND	* 5.0
Methylene Chloride	ND	* 5.0			

* = less than
ND = Not Detected

JG Patel

J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1

Respectfully submitted,

John F. Quinn

John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94120-3

DATE ANALYZED: 11/30/87

SAMPLE I.D.: EFA-3709-5

REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

<u>Compound</u>	<u>ug/kg</u>	Detection Limit <u>ug/kg</u>	<u>Compound</u>	<u>ug/kg</u>	Detection Limit <u>ug/kg</u>
Benzene	ND	* 5.0	Methyl Ethyl Ketone	ND	*10.0
Butyl Acetate	ND	* 5.0	Methyl Methacrylate	ND	* 5.0
Carbon Disulfide	ND	* 5.0	Toluene	ND	* 5.0
Chloroform	ND	* 5.0	1,1,1-Trichloroethane	ND	* 5.0
Methylene Chloride	ND	* 5.0			

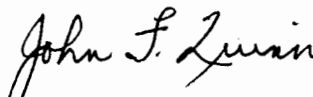
* = less than
ND = Not Detected



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1

Respectfully submitted,



John F. Quinn, Ph.D.
Environmental Chemist

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 W. Soledad Cyn. Rd.
Saugus, CA 91350

DATE REPORTED: 12/17/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB NO.: 94120-4

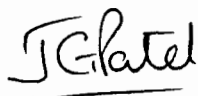
DATE ANALYZED: 11/30/87

SAMPLE I.D.: 342-2045-4

REPORT OF GC/MS ANALYSIS FOR VOLATILE ORGANICS IN SOIL (EPA 8240)

<u>Compound</u>	<u>ug/kg</u>	<u>Detection Limit ug/kg</u>	<u>Compound</u>	<u>ug/kg</u>	<u>Detection Limit ug/kg</u>
Benzene	ND	* 5.0	Methyl Ethyl Ketone	ND	*10.0
Butyl Acetate	ND	* 5.0	Methyl Methacrylate	ND	* 5.0
Carbon Disulfide	ND	* 5.0	Toluene	ND	* 5.0
Chloroform	ND	* 5.0	1,1,1-Trichloroethane	ND	* 5.0
Methylene Chloride	ND	* 5.0			

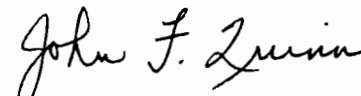
* = less than
ND = Not Detected



J. G. Patel, M.S.
Environmental Chemist

JGP/JFQ:me1

Respectfully submitted,



John F. Quinn, Ph.D.
Environmental Chemist

GL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

DATE ANALYZED: 12/02/87

LAB. NO.: 94119-6

SAMPLE I.D.: 317-6331-6

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	ND	* 3
Barium	6010	78	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	ND	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	ND	* 5
Calcium	6010	1700	*1000
Magnesium	6010	1500	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul B. Bredt

Paul Bredt
Environmental Chemist
PB/JFQ:mel

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

GL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94120-4

DATE ANALYZED: 12/02/87

SAMPLE I.D.: 342-2045-4

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	6	* 3
Barium	6010	55	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	ND	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	7	* 5
Calcium	6010	2100	*1000
Magnesium	6010	2200	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Bredt

Paul Bredt
Environmental Chemist
PB/JFQ:me1

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94120-1

DATE ANALYZED: 12/02/87

SAMPLE I.D.: BA-6125-3

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	5	* 3
Barium	6010	72	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	1.0	*0.5
Chromium	7191	ND	*50
Lead	7420	18	* 3
Nickel	7520	ND	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	10	* 5
Calcium	6010	2900	*1000
Magnesium	6010	2200	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Bredt

Paul Bredt
Environmental Chemist
PB/JFQ:me1

John F. Quinn

John F. Quinn, Ph.D.
Environmental Chemist

GL ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94120-2

DATE ANALYZED: 12/02/87

SAMPLE I.D.: BCPR-2138-3

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	4	* 3
Barium	6010	77	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	1.5	*0.5
Chromium	7191	ND	*50
Lead	7420	50	* 3
Nickel	7520	16	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	10	* 5
Calcium	6010	3800	*1000
Magnesium	6010	1900	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Brett

Paul Brett
Environmental Chemist
PB/JFQ:mel

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

ENVIRONMENTAL

ANALYTICAL CHEMISTS

CLIENT: Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

DATE REPORTED: 12/15/87

DATE RECEIVED: 11/25/87

DATE SAMPLED: 11/25/87

LAB. NO.: 94120-3

DATE ANALYZED: 12/02/87

SAMPLE I.D.: EFA-3709-5

<u>Compound</u>	<u>EPA Method</u>	<u>mg/kg (ppm)</u>	<u>Detection Limit</u>
Antimony	7041	ND	*10
Arsenic	7060	6	* 3
Barium	6010	ND	*50
Beryllium	6010	ND	*0.5
Cadmium	7131	ND	*0.5
Chromium	7191	ND	*50
Lead	7420	4	* 3
Nickel	7520	10	*10
Selenium	7740	ND	*0.5
Silver	7760	ND	* 3
Thallium	7841	ND	* 5
Boron	6010	9	* 5
Calcium	6010	6000	*1000
Magnesium	6010	2700	* 500

* = less than

ND = Not Detected

Respectfully submitted,

Paul Bredt
Paul Bredt
Environmental Chemist
PB/JFQ:me1

John F. Quinn
John F. Quinn, Ph.D.
Environmental Chemist

APPENDIX G

RESPONSE TO
EPA INFORMATION NEEDS
REQUESTED BY MICHAEL A. FERNANDEZ, P.E.

Prepared for
Bermite Division of
Whittaker Corporation
Saugus, California
EPA No. CAD 064 573 108

Prepared by
Wenck Associates, Inc.
832 Twelve Oaks Center
15500 Wayzata Boulevard
Wayzata, Minnesota 55391
612-475-0858

November 4, 1987

TABLE OF CONTENTS

	Page
General Information	1
Washwater Treatment Operations (Lead Azide)	4
East Fork Detonation Range	5
Portable Steel Magazines, 502, 504 and 506	6
Pyrotechnic Storage Magazine (Building 236)	7
Pyrotechnic Storage Magazine (Building 223)	8
Drum Staging Unit (Proximity of Building 317)	9
Temporary Drum Holding Area (Proximity of Building 342)	10
Open Burning Area	11
Former Surface Impoundment Near 317 Area	12
Former Surface Impoundment Near 342 Area	13
Tank Farm	14
Building 41	15
Old Azide Area Holding Tank and Basin	16
Purported Building 6 Septic Tank	17
Magazine 14	18
Old Dynamite Building	19
Building 59 Sump	20
Tank in Building 347	21
Transfer Basin - Melt and Pour	22
Drum Rinsing Area	23
Building 37	24

LIST OF APPENDICES

- A. Washwater Treatment Operation (Lead Azide) Details
- B. Storage Building Details
- C. Construction Details of Tank Farm

RESPONSE: GENERAL INFORMATION

The premises on which the Bermite Powder Division of Whittaker Corporation are located have been employed in the business of the design, development, formulation, fabrication, and assembly of explosive and pyrotechnic devices since approximately 1906. Whittaker Corporation purchased the business including the premises from the Bermite Powder Company in 1967.

Since Whittaker's acquisition of the facility the significant business operations involved the production of infra-red flares, illuminating flares, JATO rocket motors, Sidewinder rocket motors, Chaparral rocket motors, spin rockets, practice bombs, detonators, destructors, gas generators, squibs, 20mm, 30mm, and 50 cal. ammunition. A chronological listing of the manufacture of the above products would be difficult to determine and would not be especially meaningful since many of the products were produced simultaneously and some of them were manufactured intermittently throughout Whittaker's tenure.

Since, as far as Whittaker knows, there is no one who can accurately detail the various products manufactured and processes employed at Bermite prior to its acquisition by Whittaker, much of the information herein for periods prior to 1967 is based on reports of former employees and assumptions based upon our knowledge of what was manufactured at the facility prior to 1967. It has been reported, for example, that in addition to the above items, aerial fireworks, photoflash bombs, and certain types of dynamite were produced at this facility. Whittaker is not, however, aware that any basic chemical reaction-type processes ever took place at this facility. Based upon everything known to us, we believe that the manufacturing processes that took place at this facility were, generally, chemical formulation and mechanical assembly of the products and devices referred to above.

The operations employed at the facility in the manufacture of explosive and pyrotechnic devices include: weighing, grinding, granulating, screening, sizing, mixing, blending, drying and curing, casting, pressing, and extruding, of various chemical compounds; the stamping, mechanical and electrical assembly of component parts; and the finishing, labeling, and packaging of the finished product. Each Bermite product would generally employ a combination of some or all the above-listed unit operations. In general, only one of the above-listed unit operations would take place at a specific location. Like most munitions facilities, Bermite's manufacturing operations were located in a number of separate smaller buildings. A product line, for example, that involved weighing, blending, drying, pressing, and mechanical assembly would typically be divided among five separate buildings, one for each unit operation. These buildings were, by design, widely separated geographically for reasons of safety. In addition, the manufacturing processes used in the conduct of the business generally, were essentially the same as used in times of war or national emergency. For reasons involving both employee safety, prudent use of war-time

materiel, and other reasons, raw materials, finished goods, and salvageable waste were handled so as to minimize waste. The importance of safety procedures and thus the need to carefully and prudently handle materials--thus minimizing and controlling waste--cannot be overemphasized. A munitions facility like Bermite is unique in that, by definition, and as a part of standard operating procedures, material and waste controls were an integral part of its operations. The types of wastes generated were as variable as the number of unit operations listed. There are no records or other details available on the specific wastes generated from or by each process or product throughout the years. General information was presented in the RCRA Part A and Part B applications originally submitted by Bermite to the United States Environmental Protection Agency and the California Department of Health Services in approximately 1980 and 1986 respectively.

The wastes generated by Bermite's manufacturing activities can be broken down, practically, into the following general categories:

1. Concentrated Reactive Solids. Concentrated reactive solids were generated by a number of manufacturing operations. Typical examples of this type of waste would be:
 - (a) Trimmings or cuttings from pressing, extruding, or machining of propellant or flare grains.
 - (b) Fall-out from operations such as grinding, granulating, screening or mixing.
 - (c) Reject parts.
2. Contaminated Paper, Rags, and Disposable Tools and Containers. Each active unit operation area described above was meticulously cleaned at least daily. These cleaning operations generated a significant amount of contaminated disposables. These contaminated disposables were typically packaged in Velostat bags, overpacked in fiber drums, and staged or stored for further disposition.
3. Wash Waters and Spent Solvents. Wash waters, spent solvents, and other liquid wastes resulting from the manufacturing processes included:
 - (a) Lead azide wash waters
 - (b) Phosphorus-stabilizing wash waters
 - (c) Spent shock-gel solvent
 - (d) Slurry equipment cleaning solvent

The disposal practices that have been utilized at the site by Whittaker include the following:

1. Surface Impoundments. The former surface impoundments in the vicinity of buildings 317 and 342 were used to store and evaporate wash waters and solvents generated as described in Paragraph 3, above. Concentrates and accumulated residues from these impoundments were ultimately shipped off-site for disposal. Following the removal from service of these surface impoundments, liquid wastes were put in drums or tanks, stored onsite for less than 90 days, and shipped off-site for disposal.
2. On-Site Burning. Concentrated reactives and contaminated disposables were burned on-site at various times when authorized by the South Coast Air Quality Management District. Open burning also took place at Fort Irwin. Most recently, concentrated reactives and contaminated disposables were disposed of at a licensed hazardous waste treatment facility in Louisiana.

Further details of the various hazardous waste management practices employed by Whittaker at the Bermite facility are found in the subsequent 22 sections of this response.

RESPONSE: WASHWATER TREATMENT OPERATIONS (LEAD AZIDE)

Prior to commissioning the location referred to as RCRA management unit 3, the processing of lead azide took place at the old lead azide treatment area. See discussion of old azide area, page 16.

Following processing of the lead azide, the resulting stabilized waste was pumped and transported off-site for disposal or transferred to tanks for less than 90 days prior to off-site disposal. An explosion occurred at the old azide area on October 31, 1978. As a result of the explosion the company built this new lead azide facility. The company had planned to use a fiberglass boat hull mold as an impoundment. This hull mold was never used since the facility had been completed on a permanent basis by the time the hull mold would have been used.

Whittaker intends to complete the closure of this facility in accordance with the Revised RCRA Closure Plan approved by EPA and DHS approved September 30, 1987 (as the same may be modified in our continuing discussions with EPA and DHS) (the "Revised RCRA Closure Plan"). For more information concerning a description of the tanks, processes, and containment systems employed at RCRA management unit 3, please see Appendix A to these responses, reproduced from the RCRA Part B application. Please note that these tanks and containment systems were removed from the site and manifested as hazardous waste.

RESPONSE: EAST FORK DETONATION RANGE

The East Fork Detonation Range was used primarily to detonate old or off-spec components. This detonation range was approximately 50-feet long by 20-feet wide. Generally, materials to be detonated were packed in paper containers and placed into shallow holes at depths up to six feet. A small booster charge was loaded with the materials to be detonated and the hole was then filled to the ground surface. Generally three such holes were prepared in close proximity to each other with each of the holes containing approximately 10 pounds of net explosive weight. After preparation of the materials in the holes, and evacuation of personnel to safety, the material was detonated remotely.

For other details concerning procedures employed at the East Fork Detonation Range, please see the RCRA Revised Closure Plan.

RESPONSE: PORTABLE STEEL MAGAZINES 502, 504 AND 506

We estimate that the magazines were in operation for the following approximate periods:

502	From 1980 to 1986
504	From 1980 to 1986
506	From 1980 to 1986
3 Portable Wood Magazines	From 1980 to 1986

Appendix B to these responses gives additional information as to the construction and storage practices employed in both the steel magazines and wood magazines.

RESPONSE: PYROTECHNIC STORAGE MAGAZINE (Building 236)

Building 236 was a concrete block structure approximately 40 feet long by 20-feet wide and 12-feet high. This building was in use from approximately 1980 to 1986 and was used to store dry waste propellants. These materials were generally contained in bags which were then packed into ammo cans or fiber drums. The wastes stored in this building were off-spec flare mix, BP-1 powder, and rocket propellant. The major component of each of these wastes is magnesium. Because of the explosive nature of the materials, great care was taken to ensure that there was no spillage or leakage of any of the materials stored in this building.

The materials were stored for highly variable periods, some for only a few days while others might have been stored for months. Until January 9, 1986 most of this material was burned on-site in the burn pit area. Following January 9, 1986 this material was shipped to and treated at a licensed offsite hazardous waste treatment facility (R & D, Inc. in Colfax, Louisiana).

RESPONSE: PYROTECHNIC STORAGE MAGAZINE (Building 223)

Building 223 is a wood-frame, corrugated-metal sided building, with concrete floor and large overhead doors in addition to normal personnel entrance doors. The building is 21 feet long, 40.5 feet wide, and approximately 14 feet high. This Storage Magazine was in use from approximately 1980 - 1986 and was used to store fiber drums containing Velostat bags of dry paper contaminated with explosive material, and other disposables such as gloves and wipes used in, or resulting from the production of explosive items. The paper and other disposables were contaminated with flare-mix, rocket propellant or BP-1 powder.

Wastes were generally doubly packaged in bags and fiber drums. Because of the explosive nature of the waste, significant care was taken to ensure that there was no spillage or leaking of hazardous waste in or around this storage magazine.

Waste was stored in this building until it was burned at the burn cage area or after January 9, 1986, shipped to a licensed hazardous waste facility. The hazardous waste in the building at the time of the commencement of closure of this management unit was shipped to R&D, Inc. in Colfax, Louisiana for treatment and disposal.

RESPONSE: DRUM STAGING UNIT (Proximity of Building 317)

This was a lightly constructed wood-frame building, consisting of four posts and a wood or corrugated roof, open on all sides. The structure was approximately 12-feet long by 12-feet wide and about 8-feet tall. This structure was in use from approximately the mid-1960's until removal in February 1987. So far as anyone with whom we have spoken can recall, this unit was used primarily as a staging area or collection station where 55-gallon drums were staged until waste specialists processed them. This area was not a RCRA hazardous waste management unit since any storage was for less than 90 days.

RESPONSE: TEMPORARY DRUM HOLDING AREA (Proximity of Building 342)

This was a concrete pad constructed during summer of 1983. The containment area has the following dimensions: I.D. 130 feet by 80 feet, with a 6-inch thick 24-inch high containment wall. Construction materials were concrete, five sack mix for minimum compression strength of 2,500 PSI. The structure was reinforced with reinforcing steel conforming to ASTM A615 Grade 40 deformed reinforced steel with welded smooth wire fabric conforming to ASTM A185 with an FY of 40,000 PSI. The concrete pad sloped to draining pipes in the containment wall. Removing pipe plugs allowed precipitation to drain off. All containers held in this area were placed on pallets to prevent contact between containers and standing liquids.

The solvents held in this area were primarily hexane, cyclo hexane, MEK and acetone. We know of no other waste handled in this area.

Materials were held in this site for less than 90 days until appropriate off-site disposal was arranged, and thus it was not a RCRA hazardous waste management unit which required formal closure. Manifests for these wastes are available.

This slab was removed in January 1987.

RESPONSE: OPEN BURNING AREA

The open burning area consisted of several waste management units. These units consisted of a burn cage, a holding bunker and various pans and rails used to incinerate waste. In addition, two former burn areas which were not used after late 1983, were used primarily to burn contaminated paper and gloves. For additional details, the following summary of each of these areas provides a general description. The references in the descriptions are to the Revised RCRA Closure Plan which provides additional information and details.

BURN CAGE, PANS AND RAILS

1. Cage. The burn cage was an expanded metal cage which was used to burn contaminated paper and gloves collected from the manufacturing operations at the end of each work shift. The cage was 10 feet long by 10 feet wide by 7 feet high. Wastes were placed in the metal burn cage for burning, when authorized by the South Coast Air Quality Management District.
2. Pans. Three steel pans were used for burning wastes containing fine pieces of material or powders. The wastes were carefully spread in a thin layer over the pans and were then ignited. The pans were 31-inches long by 26 inches wide by 2-inches deep. The wastes burned were off-spec flare mix, rocket propellant, and BP-1 powder. As indicated above, the main component of these wastes was magnesium. Because of the explosive nature of the materials, care was taken to ensure that no spillage took place. Burning was conducted only when authorized by the South Coast Air Quality Management District.
3. Rails. Four steel rails were used to burn off-spec flare pellets and loose powders. As indicated above, the main component of these wastes was magnesium. These rails were 20.5-feet long by 3-inches deep. The waste materials were placed on the steel channels for treatment by burning.

Because of the explosive nature of these wastes, they were handled with extreme care and we do not believe spillage or leakage of these explosive materials took place.

Two Former Burn Areas

Two former burn areas, not used since late 1983, were used historically to burn contaminated paper and gloves. These areas are approximately 50-feet long by 25-feet wide and 40-feet long by 30-feet wide. The approximate location and size of these areas were determined by interviewing operation personnel who had used these facilities. The burn areas were protected by berms on three sides for protection of the operating personnel. Wastes were loaded into the burn areas and then ignited remotely.

These areas became covered with two to three feet of soil in late 1983 and have not been used since that date.

RESPONSE: FORMER SURFACE IMPOUNDMENT NEAR 317 AREA

The 317 area was a lined surface impoundment, so designated because it was located next to building 317. The pond was hypalon-lined and was used to collect and store waste organic solvents contaminated with reactive materials prior to manifesting for off-site treatment and/or disposal. The unit was approximately 50-feet by 50-feet in size.

The waste were removed from this unit and were shipped to an off-site Class I facility via a registered waste hauler during late 1983. Further information and details are presented in the Revised RCRA Closure Plan and in previous correspondence with EPA and DHS regarding Impoundments 317 and 342.

RESPONSE: FORMER SURFACE IMPOUNDMENT NEAR 342

The 342 area was a lined surface impoundment so designated because it was located near building 342. The pond was a hypalon-lined basin and was used to collect and store stabilized phosphorus prior to manifesting for off-site treatment and disposal. The impoundment was a two basin system with each basin being approximately 50-feet by 50-feet in dimension.

The wastes were removed from this unit and were shipped to an off-site Class 1 facility via registered waste hauler during late 1983. The unit was closed at that time under the supervision of EPA, DHS, and the Regional Water Quality Control Board--Los Angeles Region and no longer exists.

The stabilization of red phosphorus took place on the pad immediately above the site of the former surface impoundment. The characteristics of red phosphorus are included in the Revised RCRA Closure Plan.

A leak detection system was constructed prior to the construction of the surface impoundment and included a trench which contained permeable gravel and a collection pipe which terminated in an inspection box.

Upon removal of the waste and the liner, soil samples were collected from beneath the surface impoundment in 1983. The results did not detect any contaminants. These results were submitted to the DHS and the EPA at that time. Conversations with DHS and EPA following submission of these results indicated to us that this unit was considered closed.

Further information and detail are presented in the Revised RCRA Closure Plan, and in previous correspondence with EPA and DHS regarding Impoundments 317 and 342.

RESPONSE: TANK FARM

The construction details for the tank farm, located near the 317 area, is enclosed in Appendix C.

There were three tanks located at the tank farm with the dimensions and construction materials shown in Appendix C. This information was originally filed with the RCRA Part B Application by Bermite in 1985, and subsequently was withdrawn. The tank farm was operated from March 8, 1984 to December 19, 1985. During the approximate time frame of September to October 1986 the tanks were sold, disassembled and removed from the site by the buyer. The liners in the tank were removed and shipped for offsite disposal as hazardous waste. The tanks themselves were steam-cleaned and the water was shipped as hazardous waste. The concrete containment area and pad were removed in January of 1987. The tank farm was not a RCRA hazardous waste management unit. Wastes were not held at this site for more than 90 days before being transported offsite for recycling or disposal.

RESPONSE: BUILDING 41

Building 41 was originally a six-horse wooden stable. The dimensions were approximately 25-feet by 65-feet and, at one point in time, heat pellets for thermal batteries were oven cured at this facility. The facility has not been in use since approximately 1970. For the last 15 years the maintenance department had used this facility to store air conditioning parts and equipment.

The facility was of wood construction and there was an apparent septic system located at this facility that had been closed in the early 1970's.

The structure was removed on June 11, 1986. As an added precaution, because it was not known what residues, if any, were in the apparent septic system, an area was trenched on June 26, 1987. A trench 20 feet long by approximately 12 feet deep was constructed in the area of the suspected septic system area. There was no visual signs of the alleged septic tank nor any visible contamination. A Century Organic Vapor Analyzer (OVA) was used to measure organic vapors in the soil and the trench. No detectable levels of materials were present. It was thus determined that no hazardous materials were present in the soil.

RESPONSE: OLD AZIDE AREA HOLDING TANK AND BASIN

On October 31, 1978, Mr. Bruce Neubauer was fatally injured by a lead azide explosion at the old lead azide area. Though this facility was in operation for at least 20 years prior to the explosion, following the injury, the area was closed and a new azide area was constructed.

The old facility consisted of a wood frame building with a wood roof, corrugated steel sides and was approximately 12-feet by 16-feet. The building probably had a plywood floor.

The start date of operation of this unit is unknown, but the unit was operated until October 31, 1978.

The wastes that were generated at this unit were the same as the lead azide waste described in the Revised RCRA Closure Plan for the lead azide unit building 207. The wastewaters were discharged to concrete sumps after the neutralization process took place.

For safety purposes, during 1978, the sumps were carefully cleaned out and backfilled. Soil samples taken in the sump area and drainage area below this area were taken during April 1986 and showed lead EP toxicity tests of less than 0.05 mg/l.

RESPONSE: PURPORTED BUILDING 6 SEPTIC TANK

To the knowledge of the current staff, some of whom have been on-site for more than 27 years, there has not been a septic tank at building 6. The building was demolished and the demolition contractor indicated that there was no septic tank at building 6. A sanitary sink floor for hand washing was connected to a septic holding transfer station in front of building 9. The sanitary waste then was pumped to a leach field behind building 45. This leach field is still in existence. There were no wastes stored in this unit. Building 6 was removed and dismantled between December 2 and December 4, 1986.

RESPONSE: MAGAZINE 14

This building was a concrete-block building with a wood roof and cement floors with dimensions of approximately 25-feet by 25-feet. The entire complex was covered with a wood roof for weather protection. The current staff cannot recall any significant activity at this site since 1960. We have no knowledge that wastes were generated or managed at this location.

Any activity that would have taken place at this site would have included high explosives. Soil samples taken in April 1986 in an old concrete sump near the building at 1/2 to 3-1/4 inch deep were found to be non-reactive by Bermite laboratory personnel. The building and associated sump were removed on July 10, 1986.

RESPONSE: OLD DYNAMITE BUILDING

This facility was last used prior to World War II and, according to reports of people who have worked at the facility for a number of years, thought to have last been used during the 1930's. The construction date of the facility is not known. The building was a two-storey frame building approximately 25-feet by 40-feet. The building was wood-frame construction, with corrugated steel sides and all wood floors.

It is not thought that wastes were generated or managed at this site, since dynamite formulating is a mixing operation and does not generate waste.

There probably were no wastes generated and any off-spec product would have been detonated.

The building was removed and dismantled on August 26, 1986.

RESPONSE: BUILDING 59 SUMP

Building 59 was a brick building approximately 30-feet by 30-feet with a concrete floor and a wood roof. It was used primarily as an engineering office. It contained an emergency shower and a hand sink. If used, the emergency shower and hand sink were discharged to a small hole in the ground. The hole may have been brick or wood lined and had an open bottom. The building was in operation from at least 1960 until it was removed on December 18, 1986. It is not known, from people who have worked at the plant, that there were any wastes generated or managed at this location.

RESPONSE: TANK IN BUILDING 347

Building 347 was constructed in the early 1970's. It was a concrete-block building with a wood roof. It was approximately 40-feet by 60-feet. It was a production building for approximately one month during the early 1970's. To the best recollection of people who have worked at the plant, it may have contained a stainless steel holding tank during this short production period. If so, it would likely have been used to hold processed hexane only. The date of removal of the tank is not known. Recollections are that the tank was empty and unused for at least ten years prior to its removal in January of 1987.

To the best of the knowledge of the plant personnel, no wastes were generated, stored or treated at this location.

RESPONSE: TRANSFER BASIN - MELT AND POUR

The melt and pour operation took place in building 110. Building 110 was approximately 18-feet by 42-feet. It was constructed of a wood frame with corrugated steel siding. High explosives were melted and cast at this facility. All waste were removed daily and were detonated in the detonation area.

This operation was discontinued in the early 1960's. During the 1970's the building was used to package glass ampules of titanium tetrachloride. A small subsurface concrete basin was installed to catch broken glass from wash water and some of the reject ampules. The wash water was then transferred to the 342 impoundment. The titanium tetrachlorine was the only chemical in this facility. The entire facility was removed on August 5, 1987.

RESPONSE: DRUM RINSING AREA

People who had worked at the plant cannot remember an area where drum rinsing took place. It was planned to install a drum rinsing station in the vicinity of the 342 complex to be used in conjunction with the containment pads, but this station was never installed.

Sidewinder, Chapparal and Chapparal parts were steam-cleaned under a roofed structure near the 317 site. The liquids flowed through a concrete channel to the surface impoundment near the 317 area. Please refer to the information on the former 317 surface impoundment.

RESPONSE: BUILDING 37

Long-term employees recall that building 37 was a production area at least since 1960. It was still a production building until its removal on February 19, 1987. Drums stored at this area were for raw materials waiting to be processed. There was no known waste storage at this area. There is, therefore, no known rationale for calling this building a satellite hazardous waste drum station.

APPENDIX A

WASHWATER TREATMENT OPERATIONS
(LEAD AZIDE) DETAILS

Wastewater Treatment Operations Details (Lead Azide)

1. This facility was inhouse custom designed and constructed for its intended purpose of explosives neutralization. The four stainless steel (A-D) tanks were selected and purchased for their inherent ability to withstand corrosive liquids and the steel containment tank was selected for its strength and durability to contain any leakage or spilled material. No specific design standard was utilized for this installation. The facility was installed in 1977. Engineer certification not on file.

2. Tank Description:

Tank A.

- a. (1) Dimensions: 48" x 72" x 36".
(2) Capacity: 72 ft.³, 538.56 gallons.
(3) Shell Thickness: 0.1250 inches.
(4) Pressure Rating: atmospheric (open top tank).
(5) Structural Supports Consist of: 3" x 1/4" angle iron welded to bottom to prevent contact with outer containment, 1-1/2" x 1/4" angle iron along top edge of tank.
- b. Construction material 300 series stainless steel A.I.S.I. type 316.
- c. Tanks are not lined.
- d. Resistance to corrosion was determined in accordance with the data table "Corrosion Resistance of Stainless Steels" to various chemical media page 906 of DUCOMMUN Metal and Supply Co., booklet titled "Metallurgical and Engineering Data", for the constituents of this material is rated as excellent.
- e. Design specifications for the foundation, or subfoundation: 4 inch, 5 sack concrete mix, minimum compression rating 2500 psi.
- f. Date facility went into service 1977.

Tank B.

- a. (1) Dimensions: 48" x 71-1/2" x 32".
 - (2) Capacity: 63.65 ft.³, 476.12 gallons.
 - (3) Shell Thickness: 0.1250 inches.
 - (4) Pressure Rating: atomospheric (open top tank).
 - (5) Structural Supports Consist of:
 - 3" x 1/4" angle iron welded to bottom to prevent contact with outer containment, 1-1/2" x 1/4" angle iron along top to edge of tank.
- b. Construction material 300 series stainless steel A.I.S.I. type 316.
- c. Tanks are not lined.
- d. Resistance to corrosion was determined in accordance with the data table "Corrosion Resistance of Stainless Steels" to various chemical media page 906 of DUCOMMUN Metal and Supply Co., booklet titled "Metallurgical and Engineering Data", for the constituents of this material is rated as excellent.
- e. Design specifications for the foundation, or subfoundation: 4 inch, 5 sack concrete mix, minimum compression rating 2500 psi.
- f. Date facility went into service 1977.

Tank C.

- a. (1) Dimensions: 48" x 72" x 36".
 - (2) Capacity: 72 ft.³, 538.56 gallons.
 - (3) Shell Thickness: 0.1250 inches.
 - (4) Pressure Rating: atmospheric (open top tank).
 - (5) Structural Supports Consist of: 3" x 1/4" angle iron welded to bottom of tank to prevent contact of tank with

concrete pad, 1-1/2" x 1/4" angle iron
along top edge of tank.

- b. Construction material 300 series stainless steel A.I.S.I. type 316.
- c. Tanks are not lined.
- d. Resistance to corrosion was determined in accordance with the data table "Corrosion Resistance of Stainless Steels" to various chemical media page 906 of DUCOMMUN Metal and Supply Co., booklet titled "Metallurgical and Engineering Data", for the constituents of this material is rated as excellent.
- e. Design specifications for the foundation, or subfoundation: 4 inch, 5 sack concrete mix, minimum compression rating 2500 psi.
- f. Date facility went into service 1977.

Tank D.

- a. (1) Dimensions: 48" x 72 x 36".
(2) Capacity: 72 ft.³, 538.56 gallons.
(3) Shell Thickness: 0.1250 inches.
(4) Pressure Rating: atmospheric (open top tank).
(5) Structural Supports Consist of: 3" x 1/4" angle iron welded to bottom of tank to prevent contact of tank with concrete pad, 1-1/2" x 1/4" angle iron along top edge of tank.
- b. Construction material 300 series stainless steel A.I.S.I. type 316.
- c. Tanks are not lined.
- d. Resistance to corrosion was determined in accordance with the data table "Corrosion Resistance of Stainless Steels" to various chemical media page 906 of DUCOMMUN Metal and Supply Co., booklet titled "Metallurgical and Engineering Data", for the constituents of this material is rated as excellent.

- e. Design specifications for the foundation, or subfoundation: 4 inch, 5 sack concrete mix for minimum compression rating 2500 psi.
 - f. Date facility went into service 1977.
3. Diagram for each Tank.
- See Attachment XI - Drawing and Diagram Section
4. Tank A is fed by a gravity flow trough system from the process building. There is no cutoff feed system and no bypass system. Operator controlled.
- Tank B is gravity fed by a rubber hose with a clamping (hose pinch) device to stop flow from Tank A. There is no bypass system or pressure control. Operator controlled.
- Tank C and Tank D are fed by a pipe (PVC) from Tank B. The cutoff system are manually operated by valves. There is no bypass system and no pressure controls. Operator controlled.
5. Waste Description.

Tank A.

- a. Collects wash water from processing of lead-based initiating explosives compound.
- b. Specific gravity: range 1.1 to 1.50.
- c. No adverse effects have been noted between the tank materials or the waste.
- d. No vapor control on tank - open top.
- e. Tank is labeled with major constituents

Tank B.

- a. Neutralized wash water from Tank A are collected in this tank.
- b. Specific gravity: range 1.10 to 1.50.
- c. No adverse effects have been noted between the tank material and the waste collected.
- d. No vapor control system on tank, open top.

- e. Tank is labeled with major constituents.

Tank C.

- a. Neutralized, stabilized wash water from Tank B collected and held prior to removing to management Unit #9.
- b. Specific gravity: range 1.10 to 1.50
- c. No adverse effects have been noted between the tank material and waste water.
- d. No vapor control on tank-open top.
- e. Tank is labeled with major constituents.

Tank D.

- a. Neutralized, stabilized wash water, overflow from Tank C.
- b. Specific gravity: range 1.10 to 1.50.
- c. No adverse effects have been noted between tank materials and waste.
- d. No vapor control system on tank, open top.
- e. No label on tank, only wash water from Tank C is collected, no other feed system.

7. Containment System:

Tank A.

- a. Tank A is surrounded by a steel tank.
Construction material: 3/16" steel plate welded seams with 1/4" x 2-1/2" angle iron for support. The inside dimensions are 64.13" X 88.13" X 36.31" .
- b. A 3" x 1/4" angle iron is welded to the bottom plate of Tank A to prevent contact with potential accumulation of liquid in the containment. The outer steel containment tank is supported along the back edge with a 4" X 6" X 8' wood beam and along the front edge with a 4" X 4" X 8' wood beam which provides an approximate 2" slope from back to front allowing liquid flowage discharge through the drain pipe and prevents contact with the concrete pad containment.
- c. The capacity of the outer steel containment tank is 900 gallons. The inner stainless steel treatment tank is 545 gallons.
- d. Run-on is prevented by a block wall surrounding the concrete pad holding the tank, preventing flowage into the unit. The treatment and steel containment tanks are provided with covers to prevent precepitation accumulation.
- e. Samples of accumulated liquids in the containment are obtained and analyzed by inhouse laboratory for material similar to what is found in the treatment tank. To prevent overflow a hose can be connected to the drain pipe and valve and allowed to drain into Tank B if treatment is needed, or into the containment area if the liquid is determined to be precipitation only.

Tank B is of similar design and construction materials as Tank A's containment system. The dimensions, capacity, runon control and method of analysis is the same.

Tank C and Tank D.

- a. Tank C and Tank D are within a concrete containment structure. The walls are concrete approximately 6" thick. The dimensions of this structure is 9.54 ft. X 18.4 ft. X 2.67 ft.

The containment has a continuous concrete floor which is impervious to waste water.

- b. Tank C and Tank D is provided with 1/4" X 3" angle iron welded to the bottom of the tanks to prevent contact with the concrete base.
 - c. The capacity of the containment is approximately 3,500 gallons which allows adequate capacity to obtain samples, analyze and plan action to remove accumulated liquids to prevent overflow.
 - d. Run-on is prevented by the containment wall. The base of which is 2.5 feet higher than the surrounding ground surface.
 - e. The same sampling method is employed for Tank A and Tank B containment system.
8. All tanks at this management unit are entirely situated above ground. All tanks are open top and can be entered for inspection.
9. Engineer certification, not on file.

APPENDIX B
STORAGE BUILDING DETAILS

APPENDIX B

Portable Steel Magazines 502, 504 and 506

These portable steel magazines, which are lined with plywood, were used to store accumulated dry explosive waste prior to burning in the burn cage. These magazines are 16 feet long by 8 feet wide by 7 feet high. These portable steel magazines are identical to those which were used to store explosive manufacturing materials and products throughout the plant site. These three magazines were specifically designated for hazardous waste storage.

The hazardous wastes which were stored in these magazines were off-spec flare mix, rocket mix, rocket propellant or BP-1 powder. The major component of these wastes is magnesium. The materials stored here were in double containers and, because of the explosive nature of the wastes, and the need to exercise extreme care in their handling and storage, we do not believe that spillage or leakage occurred.

Portable Magazines

Three portable wood magazines were used to store dry off-spec flare mix, BP-1 powder and rocket propellant along an area called Lower Magazine Road. These buildings are 8 feet long by 14 feet wide by 10 feet high, 10 feet long by 10 feet wide by 9 feet high and 8 feet long by 12 feet wide by 8 feet high. These wastes were stored in bags which were placed inside ammo cans. As in the case of the other storage units, because of the explosive nature of the wastes and the need to exercise extreme care in their handling and storage, we do not believe that there was spillage or leakage of wastes at any time at any of the storage facilities. The wastes were stored in these magazines prior to burning in the burning cage or shipment to a licensed hazardous waste facility.

APPENDIX C

CONSTRUCTION DETAILS OF TANK FARM

Tanks and Concrete Containment Area Near the 317 Area

1. These three tanks were designed and constructed in accordance with "American Petroleum Institute" Standard 12B.

2. Description of Each Tank:

a. Design Specifications:

(1) Dimension: Tank #1 16 ft. diameter
8 ft. high.
Tank #2 27 ft. diameter
8 ft. high.
Tank #3 27 ft. diameter
8 ft. high.

(2) Capacity: Tank #1 11,000 gallons
(261.9 barrels)
Tank #2 32,000 gallons
(761.9 barrels)
Tank #3 32,000 gallons
(761.9 barrels)

(3) Shell Thickness:

Tank #1 = 0.105"
Tank #2 & 3 = 0.135"

(4) Pressure Rating: atmospheric

(5) Structural Supports: I-Beam
Steel/Deck.

b. Construction Material: Plates conform to ASTM Standard A283, grade C. Sheets have minimum tensile strength of 52,000 psi, flanges Series 300, Type 316 stainless steel, bolts hot dipped galvanized conforming to ASTM Standard A307, grade A, deck supports have basic design stress of 18,000 psi maximum with a live load of not less than 20 psf.

c. Not Applicable.

d. Corrosion or erosion resistance: Tanks protected from corrosion or erosion by the installation of magnesium anode sacrificial cathodic protection.

e. Date tanks went into service:

Tank #1 03/08/84
Tank #2 08/01/84
Tank #3 03/16/84

m

4. a. Feed System: Liquid waste is pumped via a pneumatic diaphragm pump or vacuum tanker vehicle, through a filter to the designated tank, direct.
 - b. Waste feed cutoff system is controlled by manually operated stainless steel ball valves and gate valves.
 - c. No bypass system, each tank is independent of each other.
 - d. Pressure control is by a vent located on the top deck of the tank. Rated at 2.0 ounce pressure setting and 4 ounce vacuum setting.
 - e. The tank is grounded to the pump, filter and discharge container and/or vacuum tanker vehicle during waste transfer.
5. a. Types of Waste:

Tank #1	Waste Water
Tank #2	Acetone/Water Mixture 40/60%
Tank #3	Methyl Ethyl Ketone/ Water Mixture 10/90%
 - b. Specific Gravity:

Tank #1	1.0 @ 23°C
Tank #2	0.957 @ 23°C
Tank #3	0.987 @ 23°C
 - c. Solvent and water mixtures plus waste water is compatible with steel tanks provided with magnesium anode sacrificial cathodic protection.

- d. No vapor control system is installed on the waste water or solvent/water mixture tanks.
 - e. Each tank will be labeled with the major constituents of the waste.
6. Not Applicable.
7. Containment System:
- a. Storage tank containment is a continuous impervious base to the liquid waste stored in each tank.

All the reinforcing steel conforms to ASTM A615 Grade 40. Welded smooth wire fabric conforms to ASTM A185 with $f_y = 40,000$ psi. All drain piping is controlled by gate valves which are chained and locked when not in use.
 - b. Construction precludes contact of liquid, however, all liquids are compatible. Any spill or leakage would be detected on a daily inspection basis, or during transfer of waste to/from tanks.
 - c. Capacity of the containment system is rated at 80,000 gallons.
 - d. Run-on is directed away from the containment area by downslope surface grading.
 - e. Accumulated liquids, spills or leaks can be detected by visual inspection of the tanks/containment. Analysis for constituents can be performed by on-site chemical laboratory. No overflow would be anticipated due to capacity of containment as compared to the total capacity of the storage tanks.
8. All tanks are entirely situated above ground. Two manholes on each tank allows entry into the specific tank for inspection.